

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING


FORM 3

AMENDED REPORT ☐

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> Cane Creek 32-1-25-20								
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> WILDCAT								
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>								
<b>6. NAME OF OPERATOR</b> FIDELITY E&P COMPANY						<b>7. OPERATOR PHONE</b> 713 351-1968								
<b>8. ADDRESS OF OPERATOR</b> 1801 California St. Ste 2500, Denver, CO, 80202						<b>9. OPERATOR E-MAIL</b> Jayne.gates@fidelityepco.com								
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> ML-49667			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>					
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>								
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>								
<b>20. LOCATION OF WELL</b>			<b>FOOTAGES</b>		<b>QTR-QTR</b>		<b>SECTION</b>		<b>TOWNSHIP</b>		<b>RANGE</b>		<b>MERIDIAN</b>	
<b>LOCATION AT SURFACE</b>			452 FSL 2312 FEL		SWSE		32		25.0 S		20.0 E		S	
<b>Top of Uppermost Producing Zone</b>			1072 FSL 2120 FEL		NWSE		32		25.0 S		20.0 E		S	
<b>At Total Depth</b>			745 FNL 1173 FEL		NENE		32		25.0 S		20.0 E		S	
<b>21. COUNTY</b> GRAND			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 752			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 640								
<b>27. ELEVATION - GROUND LEVEL</b> 5231			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 0			<b>26. PROPOSED DEPTH</b> MD: 11408 TVD: 7744								
<b>28. BOND NUMBER</b> 190017646/104891324			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Municipal											

Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Cond	26	20								
Surf	17.5	13.375	0 - 1000	54.5	K-55 Buttress	0.0	Type III	400	2.47	12.3
							Type III	200	2.14	14.2
I1	12.25	9.625	0 - 4369	40.0	L-80 Buttress	0.0	Class G	1030	1.25	14.4
							Class G	460	1.25	14.4
Prod	8.5	7	0 - 4000	29.0	P-110 Other	16.5	Class G	300	1.44	16.8
			4000 - 7780	32.0	HCP-110 LT&C	16.5	Class G	300	1.73	180.0
			7780 - 11408	29.0	P-110 Other	16.5	None			

ATTACHMENTS	
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>	
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

<b>NAME</b> Joy Gardner	<b>TITLE</b> Sr. Engineering Tech	<b>PHONE</b> 720 956-5763
<b>SIGNATURE</b>	<b>DATE</b> 02/11/2014	<b>EMAIL</b> joy.gardner@fidelityepco.com
<b>API NUMBER ASSIGNED</b> 43019500490000	<b>APPROVAL</b>  Permit Manager	

RECEIVED: May 27, 2014

**Fidelity Exploration & Production Company Eight Point Plan**

**CANE CREEK 32-1-25-20**  
**SEC 32 / T25S / R20E, SWSE, 452' FSL & 2312' FEL**  
**GRAND COUNTY, UTAH**

**1. & 2. ESTIMATED TOPS & ANTICIPATED OIL, GAS, & WATER ZONES:**

FORMATION	TVD-RKB (ft)	Sub-Sea (ft)	Lithology	Objective
Windgate Sand	Surface		Sandstone	
Chinle	219	+5,035	Sand/Shale	
Moenkopi	582	+4,672	Sand/Shale	
Cutler	969	+4,285	Sandstone	
Hermosa Group	1,873	+3,381	Sand/Evaporite	
Paradox	3,764	+1,490	Salt/Clastics	Secondary
Top Cane Creek	7,339	-2,085	Silt/Shale	Primary
T.D.	7,539	-2,285		
T.D. (LATERAL MD)	±11,408			

Estimated TD: **11,408' MD / 7,744' TVD****Anticipated BHP: ±6,040 Psig**

1. Lost circulation in all intervals.
2. Cement isolation is installed to surface of the well isolating all zones by cement and casing.

**3. PRESSURE CONTROL EQUIPMENT:**Intermediate & Production Hole – 10,000 Psig  
BOP schematic diagrams attached.**4. CASING PROGRAM:**

<u>CASING</u>	<u>Hole Size</u>	<u>Length</u>	<u>Size</u>	<u>WEIGHT</u>	<u>Grade</u>	<u>Thread</u>	<u>Collapse</u> (psi) a	<u>Burst</u> (psi) b	<u>Tensile</u> (1K lbs) c
Conductor	26"	0 – ±90'	20"						
Surface	17 1/2"	0' – 1,000'	13 3/8"	54.5#	J-55	BTC	1130/2.1	2730/3.0	909/2.5
Intermediate	12 1/4"	0 – 4,369'	9-5/8"	40.0#	L-80	BTC	3,090/1.5	5,750/1.2	947/2.1
Production	8-1/2"	0 – 4,000'	7"	29#	P-110	BTC	8,530/1.3	11,220/2.0	955/2.1
Production	8-1/2"	4,000 – 7,780'	7"	32#	HCP-110	BTC	11,890/1.9	12,460/2.0	955/2.1
Production	8-1/2"	7,780 – 11,408'	7"	29#	P-110	BTC	8,530/1.3	11,220/2.0	955/2.1

Surface based on full evacuation: a=9.0 ppg fluid on backside, b=9.0 ppg inside, &amp; c=9.0 ppf fluid + 100K overpull.

Intermediate based on full evacuation: a=9.0 ppg fluid on backside, b=9.0 ppg inside, &amp; c=9.0 ppf fluid + 100K overpull.

Production based on full evacuation: a=16.5 ppg fluid on backside, b=16.5 ppg inside, &amp; c=16.5 ppf fluid + 100K overpull

**All casing will be new or inspected.**

**Fidelity Exploration & Production Company Eight Point Plan**

**CANE CREEK 32-1-25-20**  
**SEC 32 / T25S / R20E, SWSE, 452' FSL & 2312' FEL**  
**GRAND COUNTY, UTAH**

**5. Float Equipment:****Surface Hole Procedure (0' - 1000'±)**

Guide Shoe

Insert Float Collar (PDC drillable)

Centralizers: 1-5' above shoe, top of jts. #2 and #3 then every 5<sup>th</sup> joint to surface. (8 total)**Intermediate Hole Procedure (0' - 4,369±)**

Guide Shoe

Insert Float Collar (PDC drillable)

Centralizers: 1-5' above shoe, top of joints. #2 and #3 then every 3<sup>rd</sup> joint to surface. (35 total)**Production Hole Procedure (0' - TD):**

Float shoe, 1 joint casing, float collar and balance of casing to surface. Thread lock float shoe, top and bottom of float collar, and top of 2<sup>nd</sup> joint. 1 per joint in the lateral (length TBD) and 2 per joint in the curve from 90° to 45°, 1 per joint to ±6,550'. (Approximately 150)

**6. MUD PROGRAM**

Interval	Mud Type	Mud Wt.	PV / YP	OWR
0' – 1,000'	Air Mist	---	---	---
1,000' - 4,369'	Air Mist/Aerated Water	---	---	---
4,369' - 11,408'	Oil Based Mud	13.5-16.5 ppg	22-32 / 12-22	+/-90:10

**Intermediate & Production Hole Procedure (4,369' - TD):** Anticipated mud weight 13.5 – 16.5 ppg depending on actual wellbore conditions encountered while drilling.

An oil based mud (OBM) system will be used to prevent fluid interaction with the salts and shales. LCM sweeps, pills, etc., will be used to prevent fluid loss. Adequate amounts of weighting material will be on hand as needed for well control.

**7. VARIANCE REQUESTS:**

**Reference:** Onshore Oil and Gas Order No. 1  
Onshore Oil and Gas Order No. 2 – Section E: Special Drilling Operations

- Fidelity E&P. requests a variance to regulations requiring a straight run blooie line to be 100' in length. (Where possible, a straight run blooie line will be used).
- Fidelity E&P requests a variance to regulations requiring the blooie line to be 100' in length. To reduce location excavation, the blooie line will be approximately 75' in length.

**Fidelity Exploration & Production Company Eight Point Plan**

**CANE CREEK 32-1-25-20**  
**SEC 32 / T25S / R20E, SWSE, 452' FSL & 2312' FEL**  
**GRAND COUNTY, UTAH**

- Fidelity E&P requests a variance to regulations, during air drilling operations only, requiring dedusting equipment. Dust during air drilling operations is controlled by water mist.
- Fidelity E&P requests a variance to regulations, during air drilling operations only, requiring an automatic igniter or continuous pilot light on the blooie line. (Not required on aerated water system).
- Fidelity E&P requests a variance that compressors are located in the opposite direction from the blooie line a minimum of 100 feet from the well bore. (Air Compressors are rig mounted).

**8. EVALUATION PROGRAM:**

**Mud Logs:** Mud log from 1,000' to TD.  
**Open-hole Logs:** Triple-Combo, ECS, OBM FMI

**9. CEMENT PROGRAM:**

**Surface Hole Procedure (Surface – 1,000'±):**

**Lead:** 400 sks Type III Halliburton cement + 2% Sodium Silicate + 2% Gypsum. Yield = 2.47 ft<sup>3</sup>/sk @ 12.30 ppg  
**Tail:** 200 sks Type III Halliburton cement + 2% Sodium Silicate + 2% Gypsum. Yield = 2.14 ft<sup>3</sup>/sk @ 14.20 ppg.  
**Top Out:** As necessary with Class "G" cement with 2% CaCl<sub>2</sub>, ¼#/sk LCM mixed at 15.6 ppg, 1.18 ft<sup>3</sup>/sk., 5.2 gps water.  
**Note:** Cement volumes will be calculated to bring lead cement to surface.

**Intermediate Hole Procedure (Surface – 4,369'±):**

**Lead:** 1030 sks 66 pps Class G + 14 pps Pozz + 0.2% Sodium Silicate + 2 pps Gypsum. Yield = 1.25 ft<sup>3</sup>/sk @ 14.40 ppg  
**Tail:** 460 sks 66 pps Class G + 14 pps Pozz + 0.2% Sodium Silicate + 2 pps Gypsum + Nitrogen. Yield = 1.25 ft<sup>3</sup>/sk @ 14.4 ppg  
**Top Out:** As necessary with Class "G" cement with 2% CaCl<sub>2</sub>, ¼#/sk LCM mixed at 15.6 ppg, 1.18 ft<sup>3</sup>/sk., 5.2 gps water.  
**Note:** Cement volumes will be calculated to bring lead cement to surface. 30% excess is included. Actual excess will be calculated and applied to completely cement the well when casing is ran.

**Production Hole Procedure (4,069 – TD):**

**Lead:** 300 sks Weighted Class G + 10% Silica Flour + 25% 100 Mesh sand. Yield = 1.44 ft<sup>3</sup>/sk @ 16.80 ppg.  
**Tail:** 300 sks Class G cement + 75 pps Hematite. Yield = 1.73 ft<sup>3</sup>/sk @ 18.00 ppg.  
**Note:** The above number of sacks is based on gauge-hole calculation, 0% excess.



**Fidelity Exploration & Production Company Eight Point Plan**

**CANE CREEK 32-1-25-20**

**SEC 32 / T25S / R20E, SWSE, 452' FSL & 2312' FEL**

**GRAND COUNTY, UTAH**

Final Cement volumes will be based upon gauge-hole plus 30% excess and the actual depth drilled to.

**CONFIDENTIAL**

**Fidelity Exploration & Production Company Eight Point Plan**

**CANE CREEK 32-1-25-20**  
**SEC 32 / T25S / R20E, SWSE, 452' FSL & 2312' FEL**  
**GRAND COUNTY, UTAH**

**10. ABNORMAL CONDITIONS:**

**Surface Hole (Surface – 1,000'±):**

Lost circulation.

**Intermediate & Production Hole (1,000'± - TD):**

Lost circulation zones and over pressure in the production zone.

**11. STANDARD REQUIRED EQUIPMENT:**

- A. Choke Manifold
- B. Upper and Lower Kelly Cock
- C. Stabbing Valve
- D. Visual Mud Monitoring

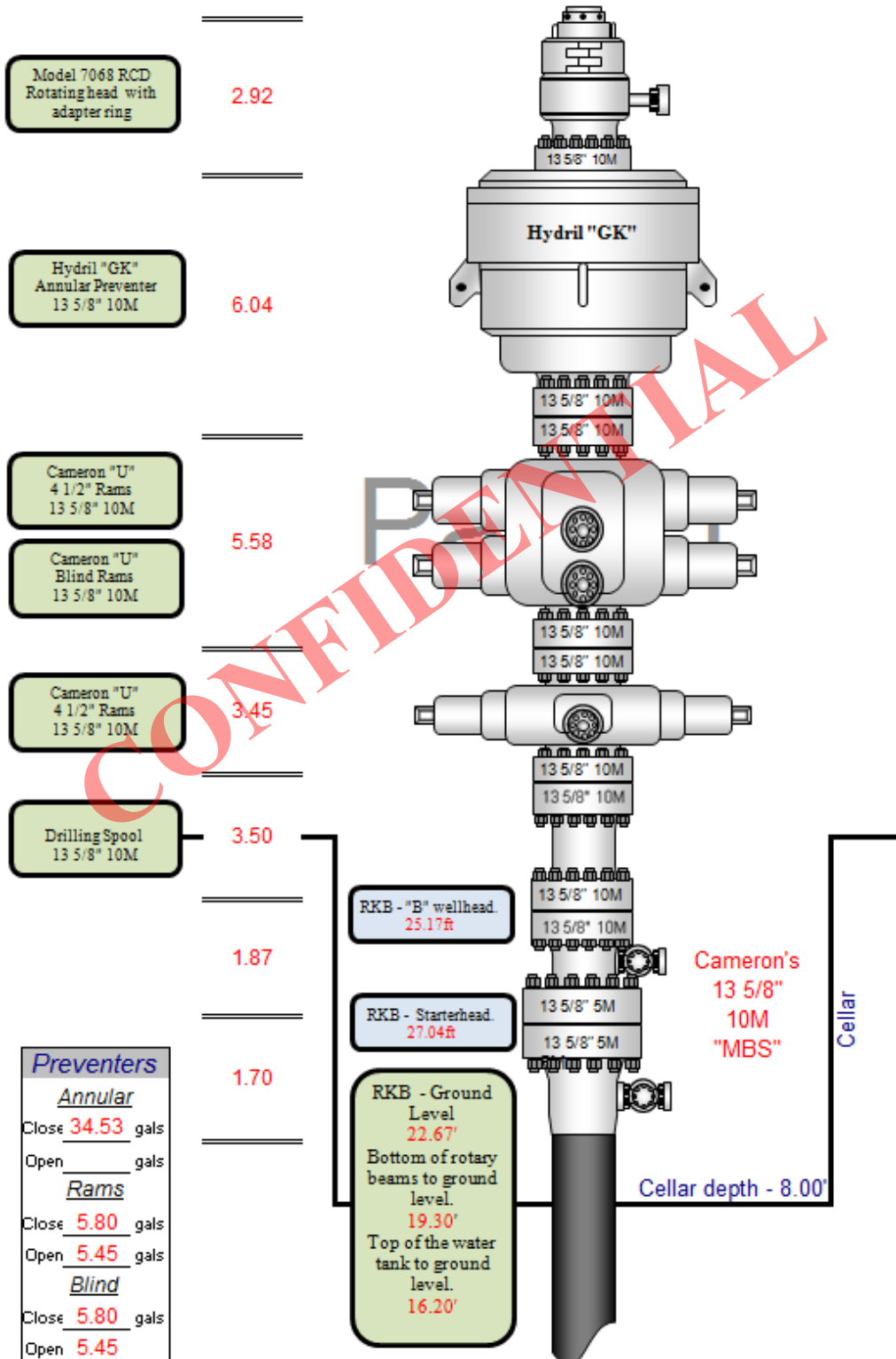
**12. HAZARDOUS CHEMICALS:**

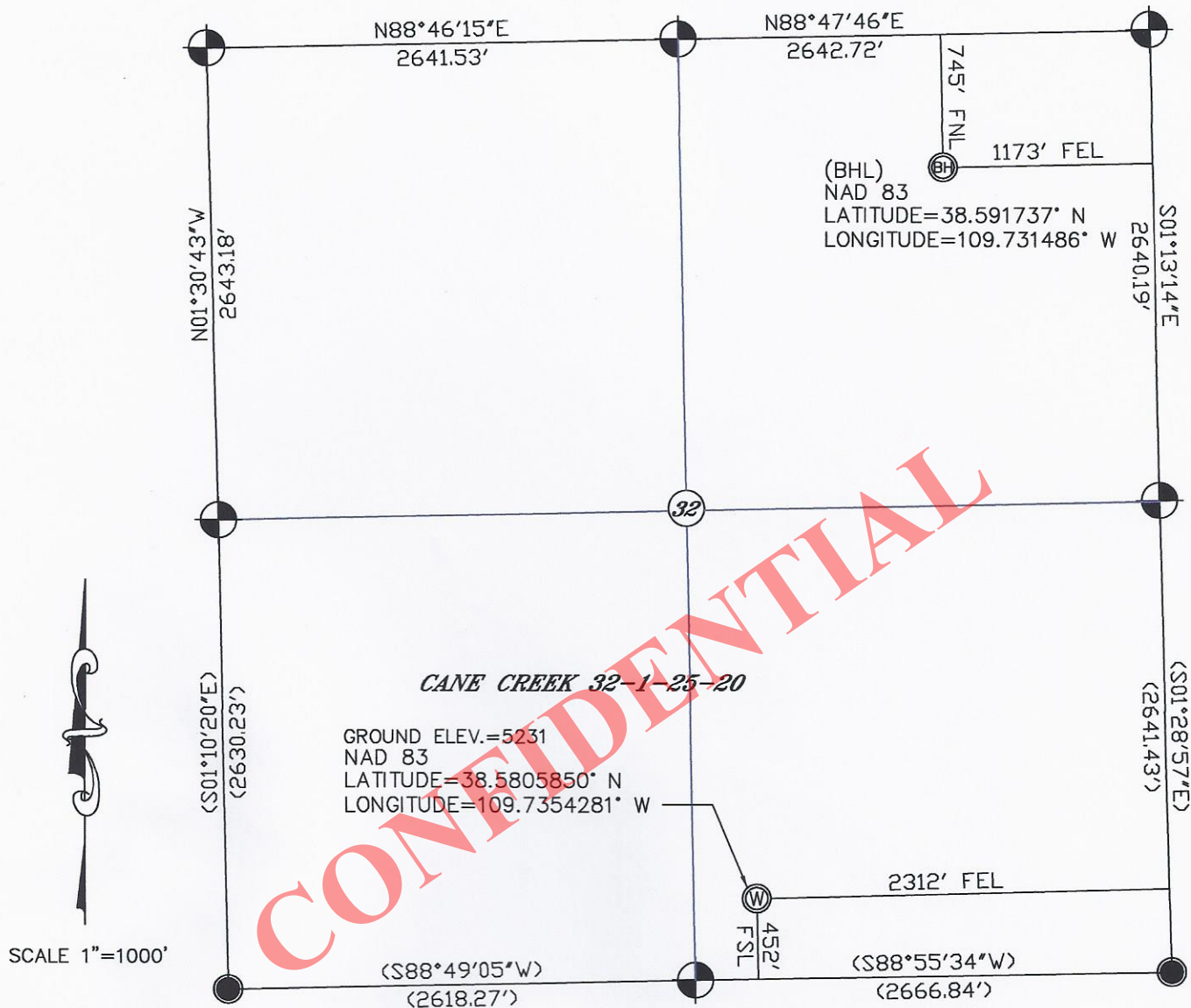
No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

(Attachment: BOP Schematic Diagram)

## Fidelity Exploration &amp; Production Company Eight Point Plan

**CANE CREEK 32-1-25-20**  
**SEC 32 / T25S / R20E, SWSE, 452' FSL & 2312' FEL**  
**GRAND COUNTY, UTAH**



*SECTION 32, T 25 S, R 20 E, SLM***LEGEND**

- FOUND GOVERNMENT MONUMENT
- SET T-POST WITH LATH AT PROPOSED WELL LOCATION
- UTAH GIS LOCATION FOR UN-SURVEYED SECTIONS
- BOTTOM HOLE LOCATION

NOTES: DATA IN PARENTHESIS IS OF RECORD. ALL OTHER DATA IS SURVEYED DATA.

ELEVATIONS ARE BASED ON A G.P.S. 2 HOUR OPUS OBSERVATION.

***KEOGH LAND SURVEYING***

45 EAST CENTER STREET

MOAB, UTAH, 84532

A SURVEY OF  
**CANE CREEK**  
**32-1-25-20**

WITHIN SECTION 32, T 25 S, R 20 E, SLM,  
 GRAND COUNTY, UTAH

PREPARED FOR

***FIDELITY EXPLORATION & PRODUCTION CO.***

DATE: 02-06-14

DRAWN BY: KBC

CHECKED BY: KBC

SCALE: 1"=1000'

F.B.#

32-1 PLAT.DWG

KAY B. CAMPBELL

KAY B. CAMPBELL

DATE



02/06/2014





LEGEND

- PROPOSED WELL
- PROPOSED ACCESS TO SUBJECT WELL
- ROAD TO OTHER WELLS
- EXISTING ROAD TO BE IMPROVED
- EXISTING ROAD

TOPOGRAPHIC MAP "A"

DATE: 01-11-14  
SCALE: 1"=1500'  
SURVEYED 01-11-14

DRAWN BY: KBC

REVISED:

FIDELITY EXPLORATION & PRODUCTION CO.

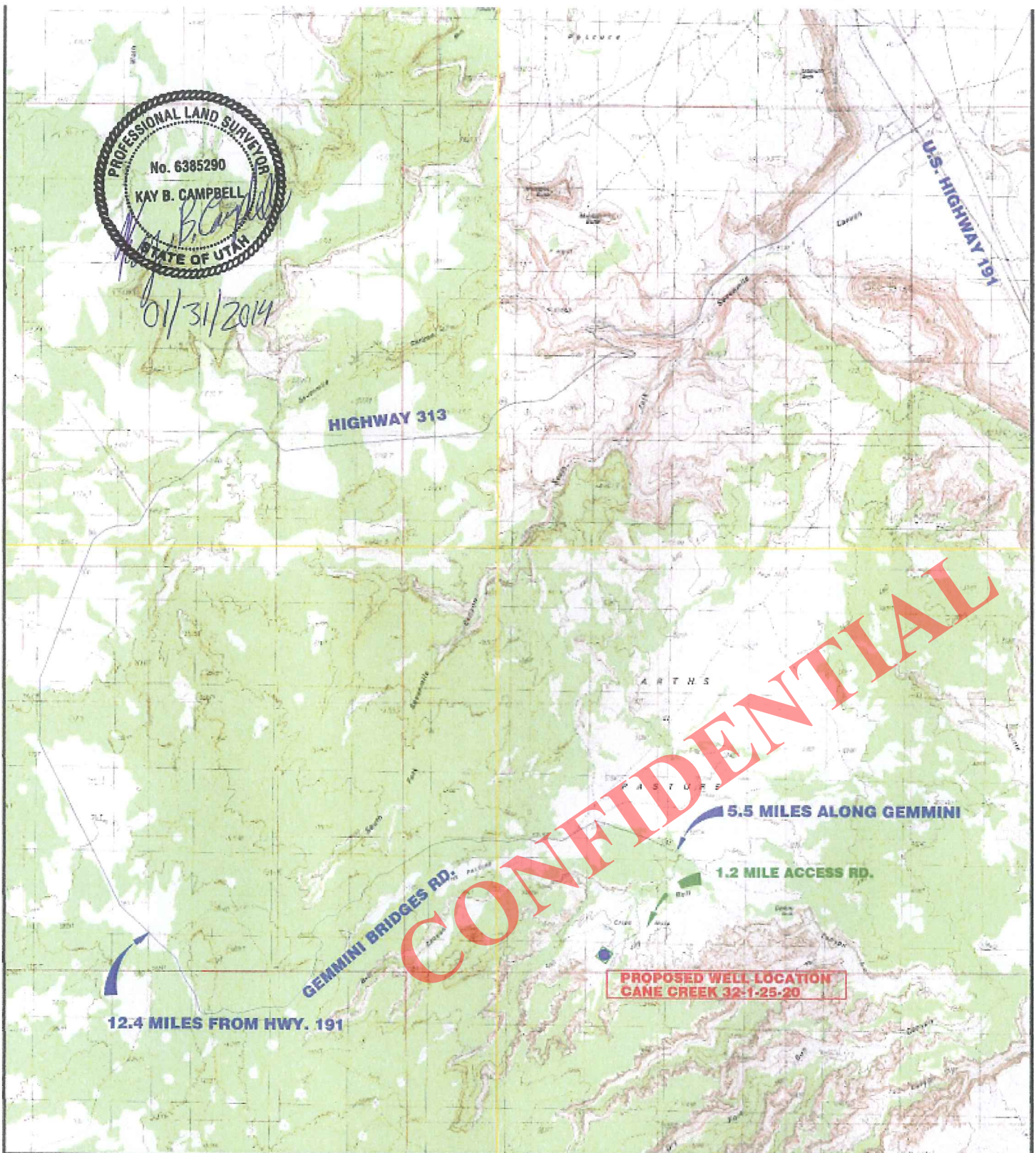
PROPOSED ACCESS TO  
CANE CREEK 32-1-25-20  
WITHIN SECTION 32, T 25 S, R 20 E, SLM, GRAND COUNTY, UTAH

KEOGH LAND SURVEYING

45 EAST CENTER STREET

MOAB, UTAH, 84532





LEGEND

- PROPOSED WELL
- PROPOSED ACCESS TO SUBJECT WELL
- ROAD TO OTHER WELLS
- EXISTING ROAD TO BE IMPROVED
- EXISTING ROAD

TOPOGRAPHIC MAP "B"

DATE: 01-11-14

SCALE: 1"=8000'

DRAWN BY: KBC

REVISED:

SURVEYED 01-11-14

FIDELITY EXPLORATION & PRODUCTION CO.

PROPOSED ACCESS TO

**CANE CREEK 32-1-25-20**

WITHIN SECTION 32, T 25 S, R 20 E, SLM, GRAND COUNTY, UTAH

**KEOGH LAND SURVEYING**

45 EAST CENTER STREET

MOAB, UTAH, 84532



***FIDELITY EXPLORATION & PRODUCTION CO.***  
**CANE CREEK 32-1-25-20**

WITHIN SECTION 32, T 25 S, R 20 E, SLM, GRAND COUNTY, UTAH



PHOTO: CENTER-NORTH

CAMERA ANGLE: SITE SOUTH

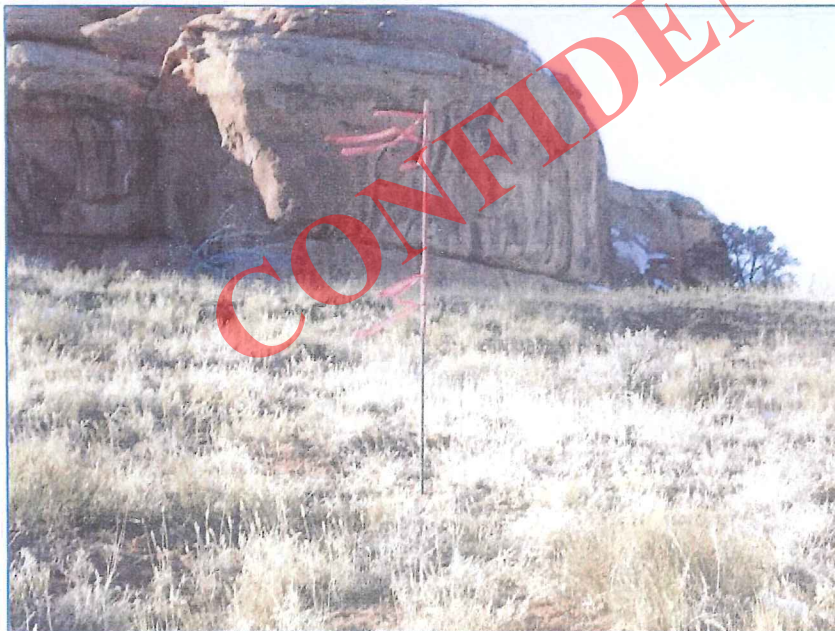


PHOTO: CENTER-EAST

CAMERA ANGLE: SITE WEST

***KEOGH LAND SURVEYING***

45 EAST CENTER STREET

MOAB, UTAH, 84532

***LOCATION PHOTOS***

TAKEN BY: KBC

DATE: 01-23-14 SURVEYED 1-23-14



***FIDELITY EXPLORATION & PRODUCTION CO.***  
**CANE CREEK 32-1-25-20**

WITHIN SECTION 32, T 25 S, R 20 E, SLM, GRAND COUNTY, UTAH

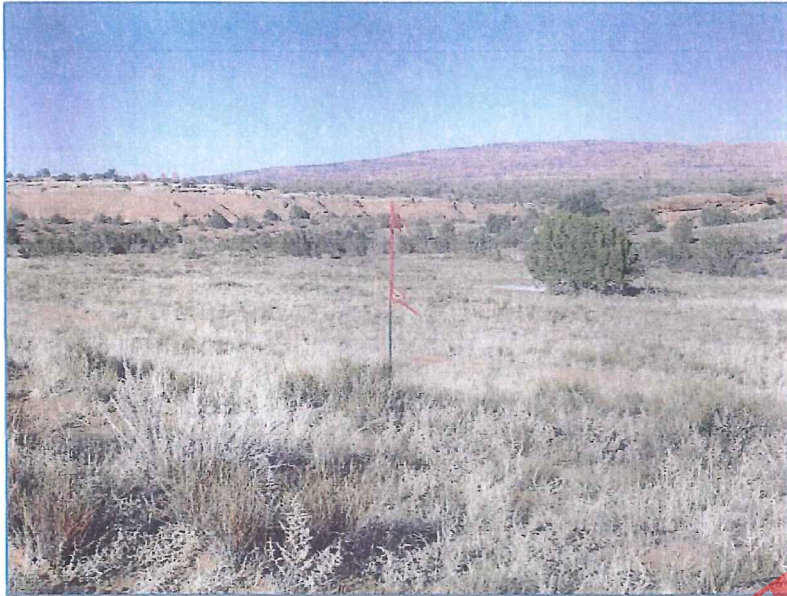


PHOTO: CENTER-SOUTH

CAMERA ANGLE: SITE NORTH



PHOTO: CENTER-WEST

CAMERA ANGLE: SITE EAST

***KEOGH LAND SURVEYING***

45 EAST CENTER STREET

MOAB, UTAH, 84532

***LOCATION PHOTOS***

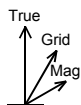
TAKEN BY: KBC

DATE: 1-23-14

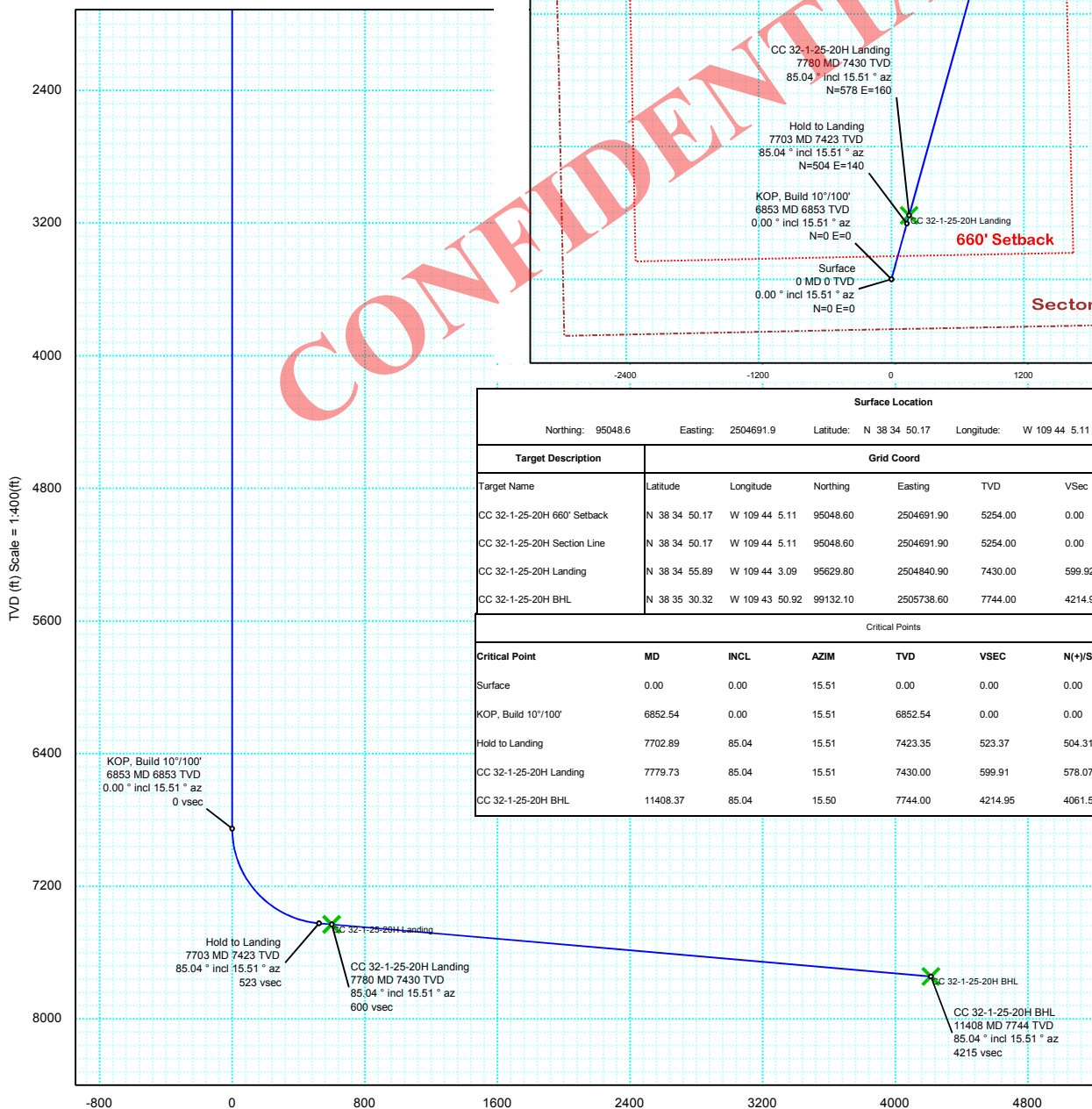
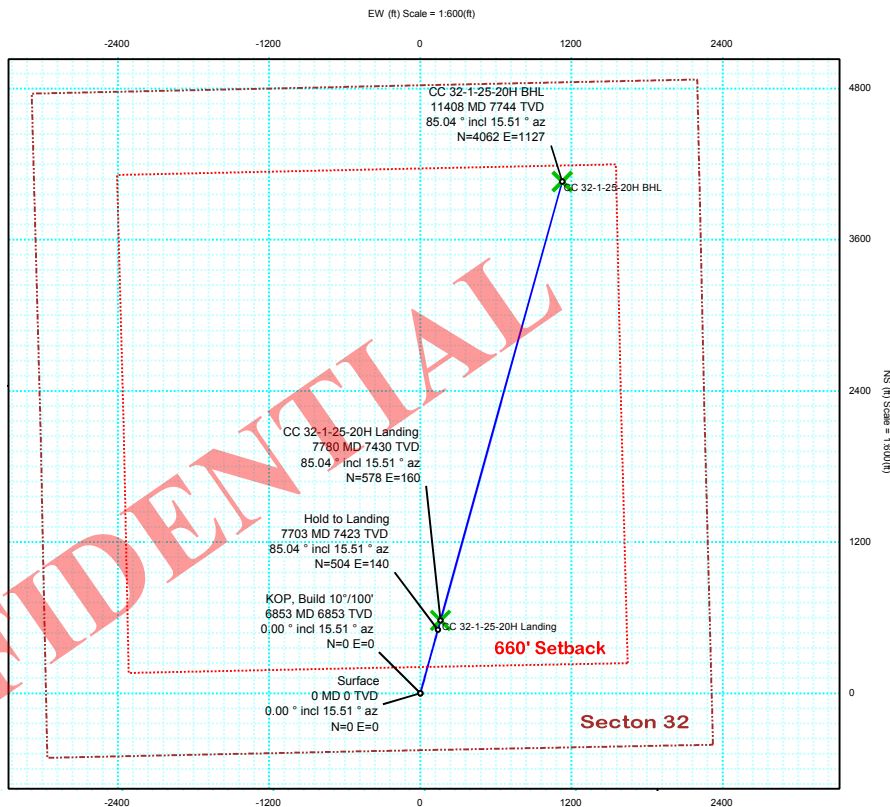
SURVEYED 1-23-14

<b>Borehole:</b> Original Hole	<b>Well:</b> CC 32-1-25-20H	<b>Field:</b> UT, Grand County (NAD 27 CZ)	<b>Structure:</b> Sec 32-25S-20E
<b>Gravity &amp; Magnetic Parameters</b> Model: BGGM 2013 Dip: 64.589° Date: 05-Feb-2014 MagDec: 10.705° FS: 51167.756nT Gravity FS: 998.825mgm (9.80665 Based)		<b>Surface Location</b> NAD27 Utah State Plane, Central Zone, US Feet Lat: N 38 34 50.17 Northing: 95048.6ftUS Grid Conv: 1.1308° Lon: W 109 44 5.11 Easting: 2504691.9ftUS Scale Fact: 1.00013608	
		<b>Miscellaneous</b> Slot: CC 32-1-25-20H TVD Ref: RKB(5254ft above Mean Sea Level) Plan: CC 32-1-25-20H R0 mdv 05Feb14	

# Proposal



True North  
Tot Corr (M->T 10.705°)  
Mag Dec (10.705°)  
Grid Conv (1.131°)



Surface Location										
Northing: 95048.6			Easting: 2504691.9		Latitude: N 38 34 50.17		Longitude: W 109 44 5.11		VSec Azimuth: 15.508	
Target Description		Grid Coord						Local Coord		
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)S(-)	E(+)W(-)		
CC 32-1-25-20H 660' Setback	N 38 34 50.17	W 109 44 5.11	95048.60	2504691.90	5254.00	0.00	0.00	0.00		
CC 32-1-25-20H Section Line	N 38 34 50.17	W 109 44 5.11	95048.60	2504691.90	5254.00	0.00	0.00	0.00		
CC 32-1-25-20H Landing	N 38 34 55.89	W 109 44 3.09	95629.80	2504840.90	7430.00	599.92	578.07	160.42		
CC 32-1-25-20H BHL	N 38 35 30.32	W 109 43 50.92	99132.10	2505738.60	7744.00	4214.95	4061.50	1126.93		
Critical Points										
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)S(-)	E(+)W(-)	DLS		
Surface	0.00	0.00	15.51	0.00	0.00	0.00	0.00			
KOP, Build 10°/100'	6852.54	0.00	15.51	6852.54	0.00	0.00	0.00	0.00		
Hold to Landing	7702.89	85.04	15.51	7423.35	523.37	504.31	139.95	10.00		
CC 32-1-25-20H Landing	7779.73	85.04	15.51	7430.00	599.91	578.07	160.42	0.00		
CC 32-1-25-20H BHL	11408.37	85.04	15.50	7744.00	4214.95	4061.50	1126.93	0.00		



## **SURFACE USE PLAN**

**Name of Operator** Fidelity Exploration & Production Company  
**Address:** 1700 Lincoln Street, Suite 2800  
Denver, CO 80203  
**Well Location:** **Cane Creek 32-1-25-20**  
452' FSL & 2312' FEL,  
SWSE, Section 32, T25S, R20E  
Grand County, UT

The proposed Cane Creek 32-1-25-20 well site will be located on surface and minerals owned by the State of Utah and managed by the School and Institutional Trust Lands Administration (SITLA). Fidelity does not anticipate any additional disturbance beyond the access road and original well pad dimensions. However, any additional construction work will be accomplished in coordination with the State and a Sundry Notice will be submitted to the State prior to construction of any new surface disturbance activity on State surface not specified in this document.

The surface owner or surface owner representative and dirt contractor will be provided with an approved copy of the surface use plan of operations and approved conditions of approval before initiating any additional construction activities. The State of Utah Authorized Officer will be notified at least 48 hours prior to beginning drilling and/or additional facilities construction for scheduling of a preconstruction meeting.

### **1. Location of Existing Roads:**

- a. The well pad is located approximately 30 miles west of Moab, Utah.
- b. Directions to the location from Moab, Utah are as follows:

Proceed northwest on Highway 191 for 11.2 miles. Turn left onto Highway 313 and proceed southwest 12.4 miles. Turn left on Gemini Bridges road and proceed east for 5.5 miles. Turn left onto access road and proceed 1.2 miles to location. For location of access roads, see Map A & B.

All roads are maintained by the Grand County Road Department or Utah State Highway Department. Any required improvements will be in coordination with and with permission from the Grand County Road Department.

- c. All existing roads will be maintained and kept in good repair during all phases of operation.



- d. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.

2. New or Reconstructed Access Roads:

- a. Approximately 1.2 miles of new access road will be constructed for the drilling of this well
- b. Surface disturbance and vehicular travel will be limited to the approved location access road.
- c. The operator will be responsible for all maintenance of the access road including drainage structures.

3. Location of Existing Wells:

- a. There are no existing wells within a one-mile radius of the proposed Cane Creek 32-1-25-20 location.

4. Location of Existing and/or Proposed Production Facilities:

- a. All permanent structures will be painted a flat, non-reflective Juniper Green or Beetle Green to match the standard environmental colors. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.
- b. Site security guidelines identified in 43 CFR 3163.7-5 and Onshore Oil and Gas Order No. 3 will be adhered to.
- c. A gas meter run will be constructed and located on lease within 500 feet of the wellhead. Meter runs will be housed and/or fenced. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- d. A tank battery will be constructed on this well site; it will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All liquid hydrocarbons production and measurement shall conform to the provisions of 43 CFR 3162.7-3 and Onshore Oil and Gas Order No. 4 and Onshore Oil and Gas Order No. 5 for natural gas production and measurement.
- e. Any necessary pits will be properly fenced to prevent any wildlife and livestock entry.
- f. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic. The road will be maintained in a safe useable condition.
- g. The site will require periodic maintenance to ensure that drainages are kept open and free of debris, ice, and snow, and that surfaces are properly treated to reduce erosion,

fugitive dust, and impacts to adjacent areas.

- h. A pipeline corridor has been considered for this well and will be applied for once production is achieved.

5. Location and Type of Water Supply:

- a. The water supply for construction, drilling and operations will be provided under a direct purchase agreement with the City of Moab municipal water supply.
- b. No water pipelines will be laid for this well.
- c. No water well will be drilled for this well.
- d. Drilling water for this will be hauled on the road(s) shown.
- e. Should additional water sources be pursued they will be properly permitted through the State of Utah – Division of Water Rights.

6. Source of Construction Material:

- a. The use of materials will conform to 43 CFR 3610.2-3.
- b. No construction materials will be removed from BLM lands.
- c. If any gravel is used, it will be obtained from a state approved gravel pit.

7. Ancillary Facilities:

- a. Garbage Containers and Portable Toilets are the only ancillary facilities proposed in this application.
- b. No camps or airstrips are proposed with this application.

8. Well Site Layout:

- a. The well will be properly identified in accordance with 43 CFR 3162.6.
- b. The existing access to the well pad will be from the west.
- c. The pad and road designs are consistent with BLM specifications.
- d. All surface disturbing activities, will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.
- e. The stockpiled topsoil (first 6 inches or maximum available) will be stored in a discontinuous windrow on the side of the location to prevent any possible contamination. All topsoil will be stockpiled for reclamation in such a way as to prevent soil loss, sterilization and contamination.
- f. Pits will remain fenced until site cleanup.

- g. The blooie line will be located at least 100 feet from the well head.
- h. Water injection may be implemented if necessary to minimize the amount of fugitive dust.

9. Plans for Restoration of the Surface (Interim Reclamation and Final Reclamation):

- a. Multiple wells are planned for the Cane Creek 32-1-25-20 location. Upon drilling of the final well for this pad, interim site reclamation will be accomplished for portions of the site not required for the continued operation of the wells.
- b. Upon final well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. Once the reserve pit is dry, the nylon reinforced plastic liner shall be torn and perforated before backfilling of the reserve pit. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximate natural contours.
- c. Following BLM published Best Management Practices interim reclamation will be completed following completion of the final well to reestablish vegetation, reduce dust and erosion, and complement the visual resources of the area.
  - 1. All equipment and debris will be removed from the area proposed for interim reclamation and the pit area will be backfilled and re-contoured.
  - 2. The area outside of the rig anchors and other disturbed areas not needed for the operation of the wells will be re-contoured to blend with the surrounding area and reseeded with the following native grass seeds:

<i>Species of Seed</i>	<i>Broadcast Application Rate (lbs/ac)</i>	<i>App. Rate PLS (lbs/ac)</i>
<b>Blue Gramma</b>	5	3
<b>Galleta</b>	2	2
<b>Indian Ricegrass</b>	3	2
<b>Bottlebrush Squirreltail</b>	1	1
<b>Total: 11</b>		<b>Total: 8</b>

- 3. Reclaimed areas receiving incidental disturbance during the life of the producing well will be re-contoured and reseeded as soon as practical.
- d. The Operator will control noxious weeds along access road use authorizations, pipeline route authorizations, well sites, or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM or the appropriate County Extension Office.
- e. Prior to final abandonment of the site, all disturbed areas, including the access road, will

be scarified and left with a rough surface. The site will then be seeded as described above.

- f. A final abandonment notice will be submitted to the State when the reclamation activities (as presented in this document) are complete and new vegetation is established. Should there be any deviation from these planned reclamation activities, the surface owner will be notified and a Sundry Notice will be submitted to the State for approval of the new closure and reclamation activities.

10. Surface and Mineral Ownership:

- a. Surface Ownership – State of Utah.
- b. Mineral Ownership – State of Utah.

11. Other Information:

Company Representatives:

Bruce Houtchens  
Drilling and Completion Manager  
1700 Lincoln St. Suite 2800  
Denver, CO 80203  
(713) 351-1950-Direct line  
(281) 217-6452 Cell  
[Bruce.houtchens@fidelityepco.com](mailto:Bruce.houtchens@fidelityepco.com)

Ryan Calhoun  
Drilling Engineer II  
1700 Lincoln St. Suite 2800  
Denver, CO 80203  
(720) 931-6455  
(303) 710-1713  
[Ryan.calhoun@fidelityepco.com](mailto:Ryan.calhoun@fidelityepco.com)

Joy Gardner – Sr. Engineering Tech  
Fidelity Exploration & Production Company  
1700 Lincoln St. Suite 2800  
Denver, CO, 80203  
(720) 956-5763 - Direct line  
[Joy.gardner@fidelityepco.com](mailto:Joy.gardner@fidelityepco.com)



OPERATOR CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge, of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed here in will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provision of 18 U.S.C. 1001 for the filing of false statements.

Executed this 6th day of February, 2014

Name: Jayne Gates Signature: \_\_\_\_\_

Position: Asset Team Manager

Address: 1700 Lincoln St. Suite 2800, Denver, CO 80203

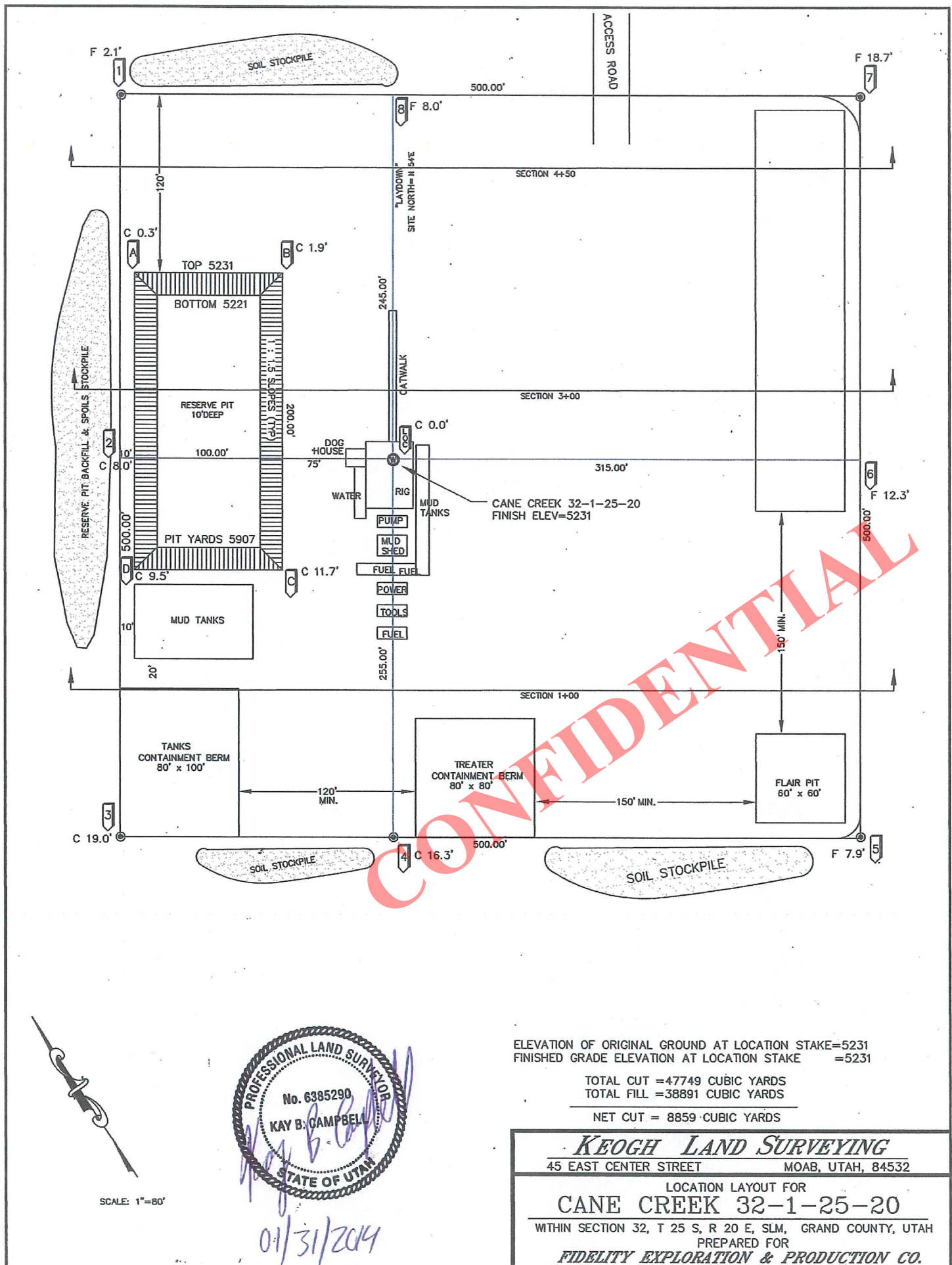
Telephone: 303 893-3133

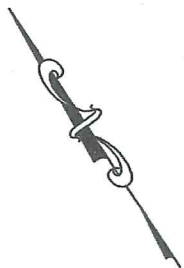
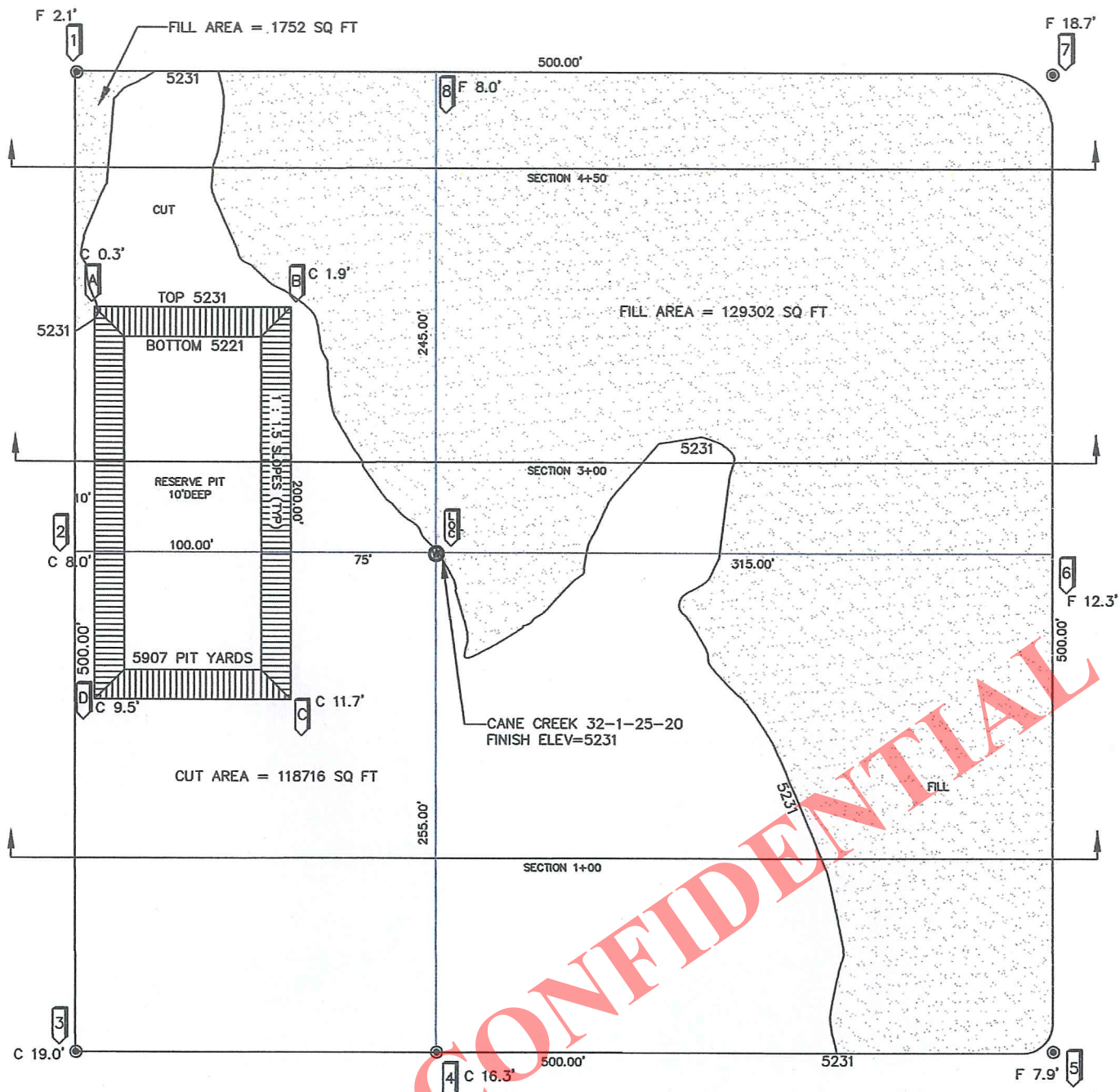
Field representative (is not above signatory)

Name: Mark Curtis – Operations Supervisor

Telephone: 307-324-5598

E-mail: Mark.Curtis@fidelityepco.com





SCALE: 1"=80'



01/31/2014

ELEVATION OF ORIGINAL GROUND AT LOCATION STAKE=5231  
 FINISHED GRADE ELEVATION AT LOCATION STAKE =5231

TOTAL CUT =47749 CUBIC YARDS  
 TOTAL FILL =38891 CUBIC YARDS

NET CUT = 8859 CUBIC YARDS

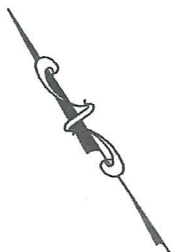
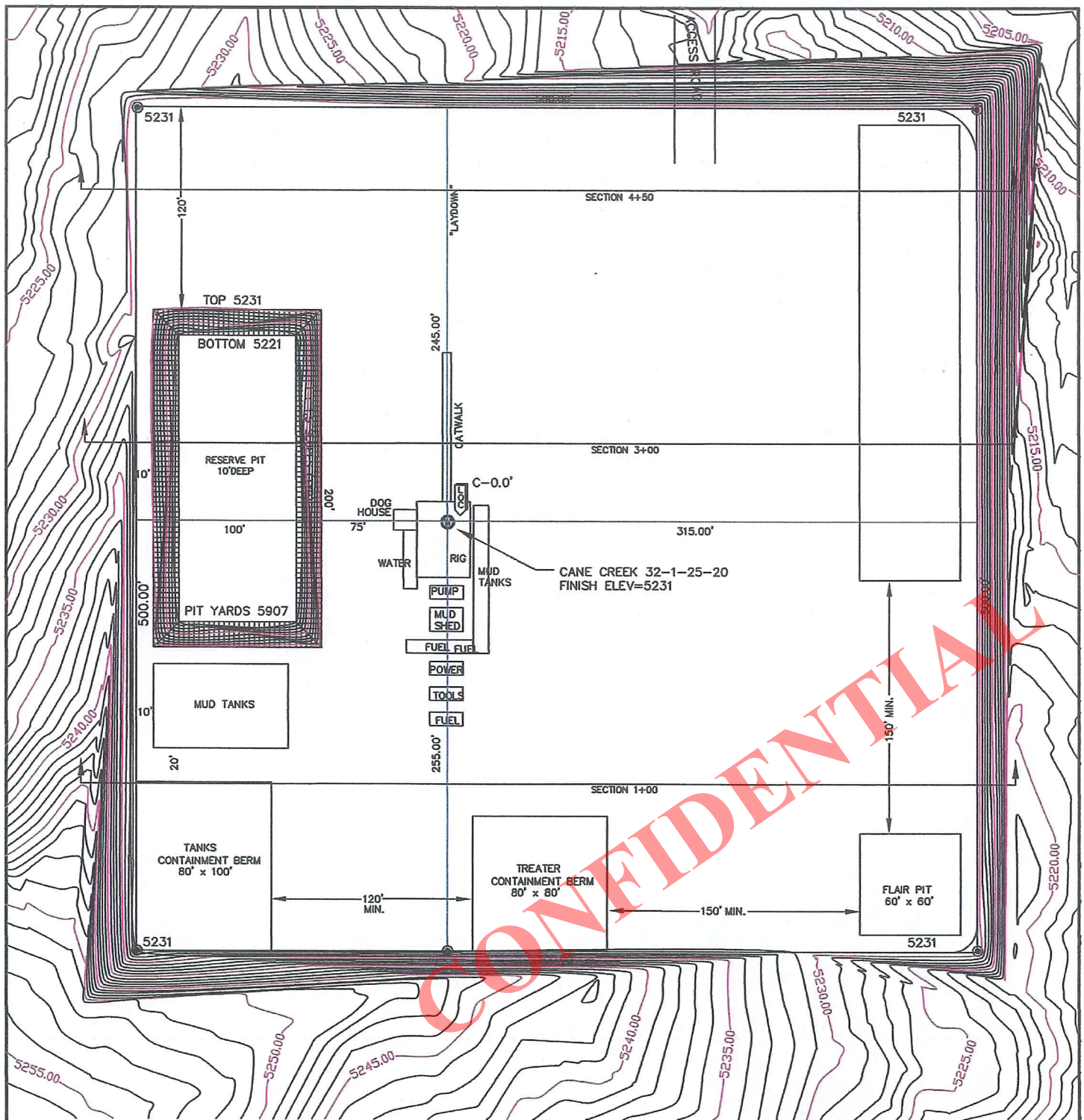
**KEOGH LAND SURVEYING**  
 45 EAST CENTER STREET MOAB, UTAH, 84532

LOCATION LAYOUT FOR  
**CANE CREEK 32-1-25-20**

WITHIN SECTION 32, T 25 S, R 20 E, SLM, GRAND COUNTY, UTAH

PREPARED FOR  
**FIDELITY EXPLORATION & PRODUCTION CO.**





SCALE: 1"=80'



ELEVATION OF ORIGINAL GROUND AT LOCATION STAKE=5231  
FINISHED GRADE ELEVATION AT LOCATION STAKE =5231

TOTAL CUT =47749 CUBIC YARDS  
TOTAL FILL =38891 CUBIC YARDS

NET CUT = 8859 CUBIC YARDS

**KEOGH LAND SURVEYING**

45 EAST CENTER STREET

MOAB, UTAH, 84532

LOCATION LAYOUT FOR  
**CANE CREEK 32-1-25-20**

WITHIN SECTION 32, T 25 S, R 20 E, SLM, GRAND COUNTY, UTAH

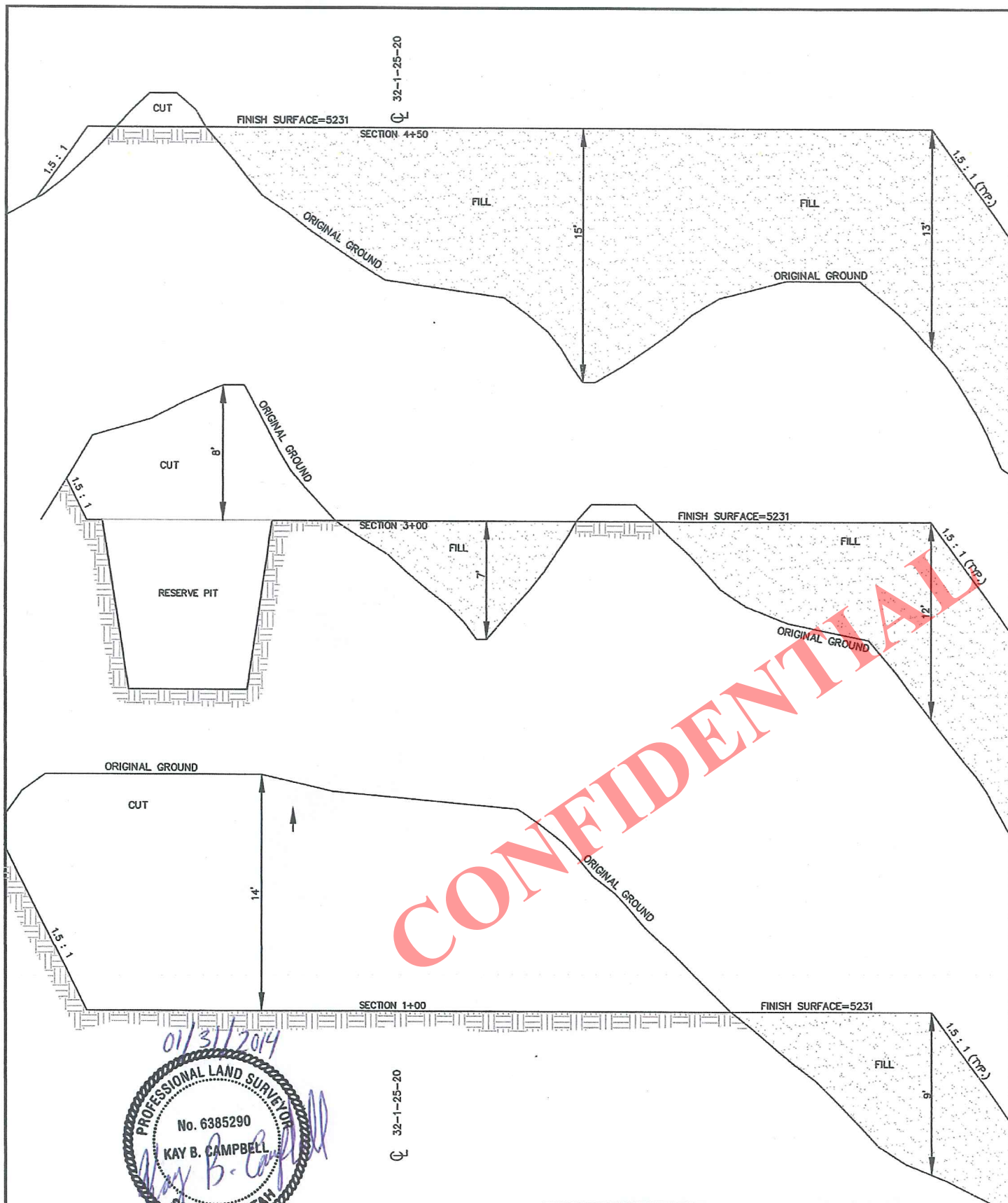
PREPARED FOR

**FIDELITY EXPLORATION & PRODUCTION CO.**









ELEVATION OF ORIGINAL GROUND AT LOCATION STAKE=5231  
FINISHED GRADE ELEVATION AT LOCATION STAKE =5231

TOTAL CUT =47749 CUBIC YARDS

TOTAL FILL =38891 CUBIC YARDS

NET CUT = 8859 CUBIC YARDS

### KEOGH LAND SURVEYING

45 EAST CENTER STREET

MOAB, UTAH, 84532

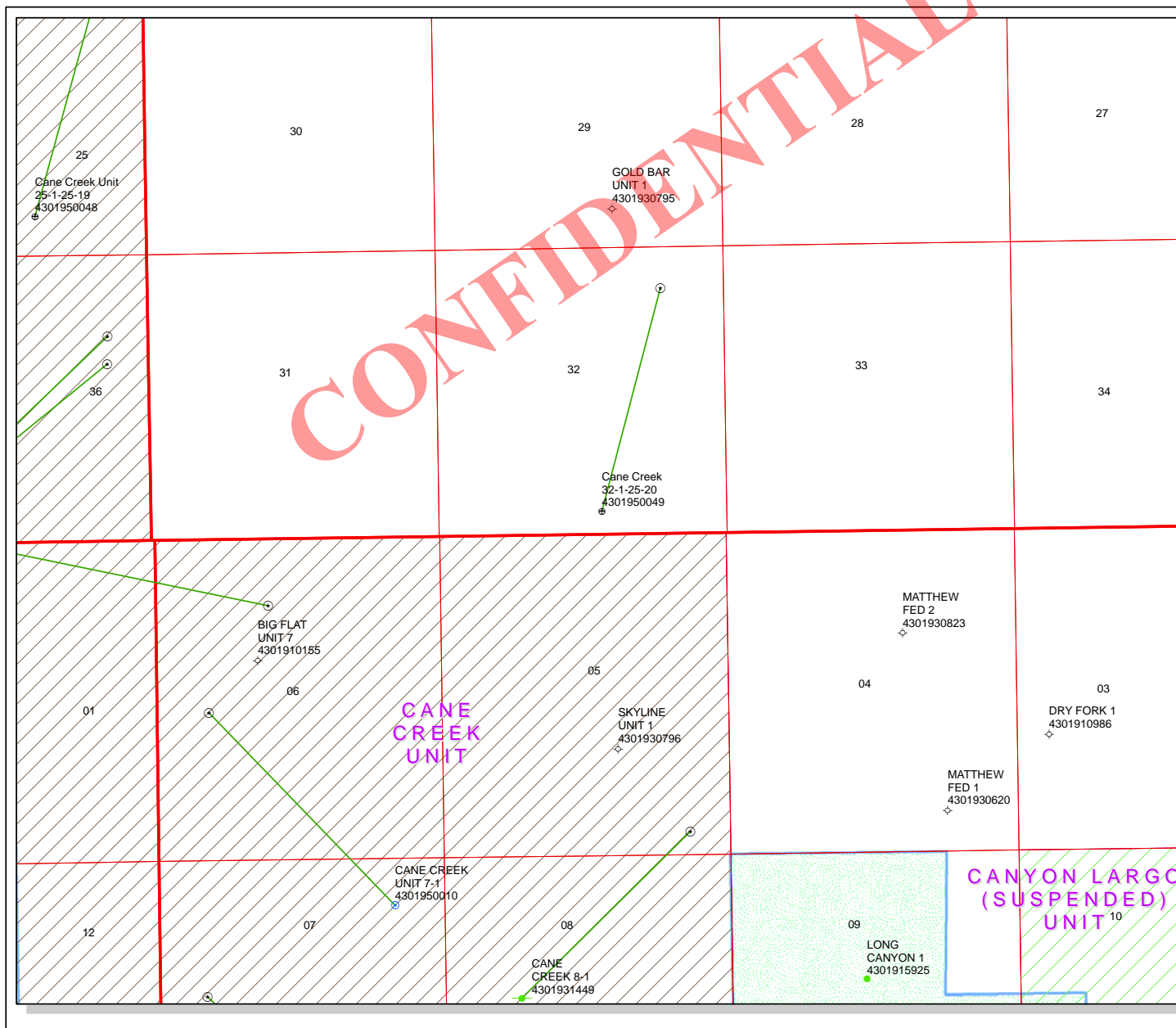
LOCATION LAYOUT FOR

## CANE CREEK 32-1-25-20

WITHIN SECTION 32, T 25 S, R 20 E, SLM, GRAND COUNTY, UTAH

PREPARED FOR

FIDELITY EXPLORATION & PRODUCTION CO.



API Number: 4301950049

Well Name: Cane Creek 32-1-25-20

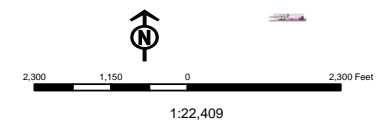
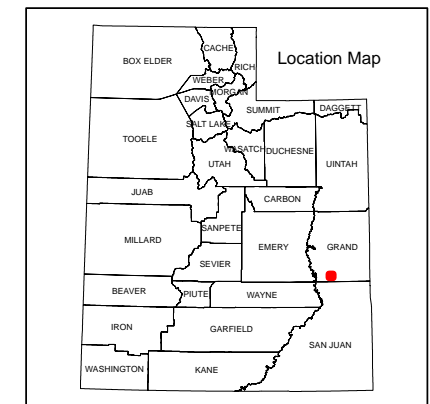
Township: T25.0S Range: R20.0E Section: 32 Meridian: S

Operator: FIDELITY E&amp;P COMPANY

Map Prepared: 2/13/2014  
Map Produced by Diana Mason

Wells Query		Units	
Status		STATUS	
APD - Approved Permit		ACTIVE	
DRL - Spudded (Drilling Commenced)		EXPLORATORY	
GIW - Gas Injection		GAS STORAGE	
GS - Gas Storage		NF PP OIL	
LOC - New Location		NF SECONDARY	
OPS - Operation Suspended		PI OIL	
PA - Plugged Abandoned		PP GAS	
PGW - Producing Gas Well		PP GEOTHERML	
POW - Producing Oil Well		PP OIL	
SGW - Shut-in Gas Well		SECONDARY	
SOW - Shut-in Oil Well		TERMINATED	
TA - Temp. Abandoned			
TW - Test Well			
WOW - Water Disposal			
WW - Water Injection Well			
WSW - Water Supply Well			

Fields	
STATUS	
Unknown	
ABANDONED	
ACTIVE	
COMBINED	
INACTIVE	
STORAGE	
TERMINATED	





Well Name	FIDELITY E&P COMPANY Cane Creek 32-1-25-20 43019500490000			
String	Cond	Surf	I1	Prod
Casing Size(")	20.000	13.375	9.625	7.000
Setting Depth (TVD)	90	1000	4369	11408
Previous Shoe Setting Depth (TVD)	0	90	1000	4369
Max Mud Weight (ppg)	8.3	9.0	9.0	16.5
BOPE Proposed (psi)	0	500	10000	10000
Casing Internal Yield (psi)	1000	2730	5750	11220
Operators Max Anticipated Pressure (psi)	6040			10.2

Calculations	Cond String	20.000	"
Max BHP (psi)	.052*Setting Depth*MW=	39	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	28	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	19	NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	19	NO
Required Casing/BOPE Test Pressure=		90	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

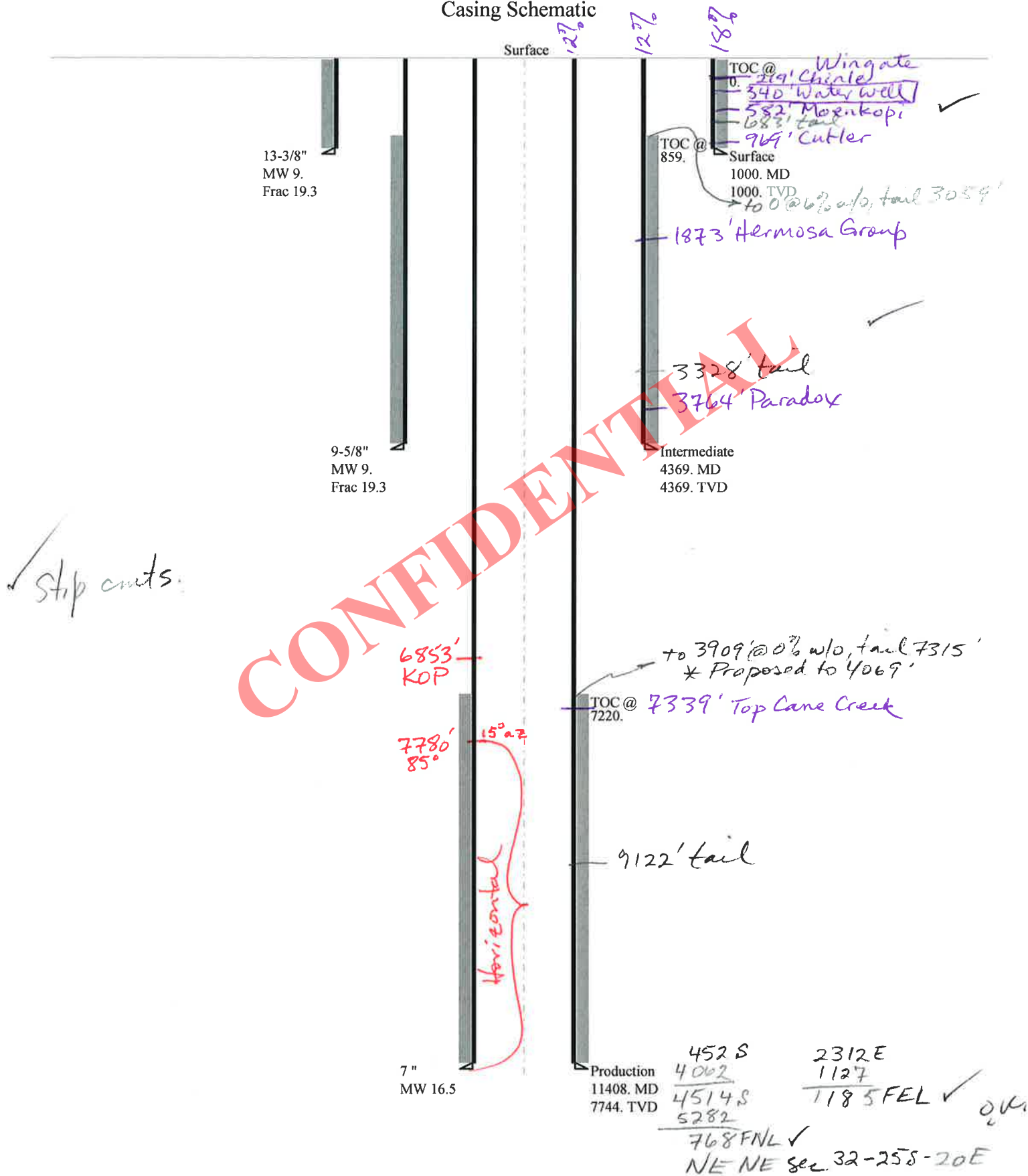
Calculations	Surf String	13.375	"
Max BHP (psi)	.052*Setting Depth*MW=	468	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	348	YES air/mist
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	248	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	268	NO OK
Required Casing/BOPE Test Pressure=		1000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		90	psi *Assumes 1psi/ft frac gradient

Calculations	I1 String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	2045	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1521	YES 10M BOPE, annular preventer, dbl rams, blind rams, rotating
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1084	YES head, drilling spool
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1304	NO OK
Required Casing/BOPE Test Pressure=		4025	psi
*Max Pressure Allowed @ Previous Casing Shoe=		1000	psi *Assumes 1psi/ft frac gradient

Calculations	Prod String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	9788	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	8419	YES 10M BOPE, annular preventer, dbl rams, blind rams, rotating
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	7278	YES head, drilling spool
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	8239	NO OK
Required Casing/BOPE Test Pressure=		7854	psi
*Max Pressure Allowed @ Previous Casing Shoe=		4369	psi *Assumes 1psi/ft frac gradient

# 43019500490000 Cane Creek 32-1-25-20

## Casing Schematic



Well name:	<b>43019500490000 Cane Creek 32-1-25-20</b>		
Operator:	<b>FIDELITY E&amp;P COMPANY</b>		
String type:	Surface	Project ID:	43-019-50049
Location:	GRAND	COUNTY	

**Design parameters:****Collapse**

Mud weight: 9.000 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 88 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

**Burst:**

Design factor 1.00

Cement top: Surface

**Burst**

Max anticipated surface pressure: 880 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 1,000 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.

Neutral point: 867 ft

**Non-directional string.****Re subsequent strings:**

Next setting depth: 4,369 ft  
Next mud weight: 9.000 ppg  
Next setting BHP: 2,043 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 1,000 ft  
Injection pressure: 1,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	1000	13.375	54.50	J-55	Buttress	1000	1000	12.49	13279
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	468	1130	2.417	1000	2730	2.73	54.5	853.2	15.66 B

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: April 17, 2014  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 1000 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kernler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>43019500490000 Cane Creek 32-1-25-20</b>	
Operator:	<b>FIDELITY E&amp;P COMPANY</b>	
String type:	Intermediate	Project ID: 43-019-50049
Location:	GRAND COUNTY	

**Design parameters:****Collapse**

Mud weight: 9.000 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 135 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 859 ft

**Burst**

Max anticipated surface pressure: 3,408 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 4,369 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.

Neutral point: 3,784 ft

**Non-directional string.****Re subsequent strings:**

Next setting depth: 7,744 ft  
Next mud weight: 16.500 ppg  
Next setting BHP: 6,638 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 4,369 ft  
Injection pressure: 4,369 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	4369	9.625	40.00	L-80	Buttress	4369	4369	8.75	66898
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2043	3090	1.513	4369	5750	1.32	174.8	916.3	5.24 B

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: April 17, 2014  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 4369 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43019500490000 Cane Creek 32-1-25-20</b>		
Operator:	<b>FIDELITY E&amp;P COMPANY</b>		
String type:	Production	Project ID:	43-019-50049
Location:	GRAND	COUNTY	

**Design parameters:****Collapse**

Mud weight: 16.500 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 182 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 7,220 ft

**Burst**

Max anticipated surface pressure: 4,934 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 6,638 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

**Directional Info - Build & Hold**

Kick-off point 6853 ft  
Departure at shoe: 4214 ft  
Maximum dogleg: 10 °/100ft  
Inclination at shoe: 85.04 °

Tension is based on air weight.

Neutral point: 5,883 ft

Estimated cost: 142,325 (\$)

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
3	4000	7	29.00	P-110	Buttress	4000	4000	6.059	48338
2	3800	7	32.00	HCP-110	Buttress	7432	7800	6	50386
1	3608	7	29.00	P-110	Buttress	7744	11408	6.059	43601

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
3	3429	8182	2.386	5814	11220	1.93	234.9	929.4	3.96 B
2	6370	10755	1.688	6569	11640	1.77	118.9	1024.9	8.62 B
1	6638	8530	1.285	6638	11220	1.69	9	929.4	99.99 B

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: April 17, 2014  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 7744 ft, a mud weight of 16.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

*Engineering responsibility for use of this design will be that of the purchaser.*



Diana Mason <dianawhitney@utah.gov>

---

## Fidelity Well Approval

---

**Jeff Conley** <jconley@utah.gov>

Tue, May 20, 2014 at 5:40 PM

To: Bradley Hill <bradhill@utah.gov>, Diana Mason <dianawhitney@utah.gov>

Cc: starpoint <starpoint@etv.net>, Bart Kettle <bartkettle@utah.gov>, Jim Davis <jimdavis1@utah.gov>, dina.brown@fidelityepco.com

Hello,

The following well has been approved by SITLA including arch and paleo with the paleo stipulation that a paleo spot check be conducted after construction of the pad, prior to installation of a pit liner. During the same visit, any modifications to the Crips Hole Road should be inspected for paleo resources. In addition to these stipulations, SITLA requires Fidelity Exploration and Production fence the entire pad post-construction. Finally, Fidelity is required to perform baseline and post-well completion water quality testing of the nearby water well on SITLA property, and provide these results to SITLA.

(4301950049) Cane Creek 32-1-25-20

Thank you,

Jeff Conley  
SITLA Resource Specialist  
[jconley@utah.gov](mailto:jconley@utah.gov)  
801-538-5157

CONFIDENTIAL

RECEIVED: May 21, 2014

# **ON-SITE PREDRILL EVALUATION**

## **Utah Division of Oil, Gas and Mining**

**Operator** FIDELITY E&P COMPANY  
**Well Name** Cane Creek 32-1-25-20  
**API Number** 43019500490000 **APD No** 9402 **Field/Unit** WILDCAT  
**Location:** 1/4,1/4 SWSE **Sec** 32 **Tw** 25.0S **Rng** 20.0E 452 FSL 2312 FEL  
**GPS Coord (UTM)** **Surface Owner**

### **Participants**

Bart Kettle-DOGM, Robby Edgel-UDWR, Jeff Conley-SITLA, Charlie Harrison-Harrison Oil Field Services, Dina Brown-Fidelity E&P Company, Lloyd-Fidelity E&P.

### **Regional/Local Setting & Topography**

Proposed project site is located ~19 miles northwest of Moab Utah, in Grand County Utah. On a regional setting the proposed project is located in the Canyonlands Region of the Colorado Plateau. The Canyonlands Region is renowned for its red rock canyons and spectacular views. Tourism is a growing industry in the region. In close proximity to the proposed project site, Dead Horse State Park, Aches National Park and Canyonlands National Park are popular destinations along with the community of Moab Utah. On a local scale the proposed project site is located near Gemini Bridges Road in Crips Hole. Local points of interest include: Mosquito Arch, Bullwhip Arch, Crips Arch, Boulder Bridge, Gemini Arch, Gemini Bridges, Arths Pasture, Seven mile Canyon, Long Canyon, Dead Horse Point, Horsetheif Point, Mineral Bottoms, Islands in the Sky, Hell Roaring Canyon, Courthouse Rock and Dubinky Point. Topography is typical of the Canyonlands Region: a series of large sandy mesa's abruptly falling off into steep canyons comprised of alternating layers of sandstone and shale. Climatic conditions within the region are arid, and vegetation is typically sparse. The proposed project site is located on wind deposited sandy loams surrounded by Wingate sandstone outcrops. Precipitation is considered a 8-10" precept zone. Soils are dominated by Eolian deposits and are predominantly unstable sands and sandy loams. Vegetation would be described as Pinion-Juniper Woodlands and black brush communities. Water drainage is to the east, entering drainages within Crips Hole immediately, Bull Canyon within 1.75 miles and the Colorado River within 6.5 miles. No perennial water sources were observed in close proximity to the project site however a water right is recorded in close proximity.

### **Surface Use Plan**

#### **Current Surface Use**

Recreational  
Wildlfe Habitat  
Grazing

#### **New Road Miles**

0.6

#### **Well Pad**

Width 500 Length 500

#### **Src Const Material**

Onsite

#### **Surface Formation**

WINGT

#### **Ancillary Facilities N**

0.6 mile of two track will be up graded for access to well pad.

**Waste Management Plan Adequate?** Y

### **Environmental Parameters**



**Affected Floodplains and/or Wetlands N**

Ephemeral drainages adjacent to both sides of proposed project site.

**Flora / Fauna**

Flora

Grass: Muhly spp., cheatgrass, curly galleta, Indian ricegrass.

Forbs: Russian thistle, sunflower, multiple unknown annuals.

Shrubs: Four wing salt brush, Mormon tea, winter fat.

Trees: Utah Juniper

Succulents: Prickly pear cactus spp.

Fauna: Mule deer, big horn sheep, coyote, kit fox, gray fox. Seasonal use by migrating birds such as sage sparrow, cassin finch, house finch, pinion jay, white crowned sparrow, gray crowned rosy finch, blue gray knat catcher, Bewick's wren, black throated sparrow, black capped chickadee, Brewers sparrow, bushtit, western kingbird, chipping sparrow, common nighthawk, Coppers hawk, sharp shin hawk, red tailed hawk, ruff legged hawk, golden eagle, turkey vulture, Downey wood pecker, juniper titmouse, northern shrike, mountain bluebird, mourning dove, pine siskin, sage thrasher, western blue bird, and western meadow lark. . Host of small rodents and reptiles possible such as: Black tailed rabbit, cottontail rabbit, woodrat spp, kangaroo rat spp., deer mouse, pinion mouse, rock squirrel, spotted skunk, and antelope squirrel.

**Soil Type and Characteristics**

Reddish orange sands and sandy loams.

**Erosion Issues Y**

Soils prone to wind and water erosion once disturbed.

**Sedimentation Issues Y**

Increased sedimentation into ephemeral wash's likely until soil piles are stabilized.

**Site Stability Issues Y**

Spoils pile, or other rock will be required at corner #2 to prevent storm water from entering reserve pit.

**Drainage Diverson Required? Y**

Spoils pile from reserve pit should be placed at corner #2.

**Berm Required? Y**

Berm required around all equipment containing fluids.

**Erosion Sedimentation Control Required? Y**

Seeding should be completed outside of anchors within one year following well pad construction.

**Paleo Survey Run? Y    Paleo Potental Observed? N    Cultural Survey Run? Y    Cultural Resources? Y**

**Reserve Pit**

**Site-Specific Factors**

**Distance to Groundwater (feet)**

**Site Ranking**

**20**

<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	500 to 1320	10
<b>Distance to Other Wells (feet)</b>	>1320	0
<b>Native Soil Type</b>	High permeability	20
<b>Fluid Type</b>	Oil Base Mud Fluid	15
<b>Drill Cuttings</b>	Salt or Detrimental	10
<b>Annual Precipitation (inches)</b>		0
<b>Affected Populations</b>		
<b>Presence Nearby Utility Conduits</b>	Not Present	0
<b>Final Score</b>	75	1 Sensitivity Level

**Characteristics / Requirements**

Proposed drilling system includes the use of a oil based mud drilling system to stabilize hole through Paradox salt zones. As such a reserve pit is being proposed along with a closed loop drilling system for oil based drilling mediums.

Proposed drilling program is anticipated to exceed 30 days. Due to prolonged drilling program pit liners shall be inspected weekly to assure integrity.

Reserve pit fluids at sites with comparable drilling programs within the Paradox formation have had TDS in excess of 50,000 mg/l. Additional reclamation steps may be required for materials high in chlorides. Precautions should be taken while drilling to assure salt or detrimental cuttings are not mixed with normal rock cuttings.

Surface formations are members of the Glen Canyon group and are capable of containing fresh water aquifers. Permeability of soils and underlying sandstones is medium to high. Pit liner of 24 ml for reserve pit shall be properly installed with bedding of sand or felt. Tanks and handling equipment containing oil based drilling materials should be underlain with a 20 mil synthetic liner as secondary containment.

**Closed Loop Mud Required?    Liner Required?    Liner Thickness    Pit Underlayment Required?**

**Other Observations / Comments**

Access road is proposed as a 14' running surface with turnouts. Minimal construction will be completed until well is deemed capable of commercial production. Pit run will be placed at wash crossing and portions of road requiring maintenance during drilling operations. Due to cultural site in close proximity to proposed access road cultural supervision is required during construction. Wash crossing should be maintained and stabilized through drilling and production of well.

DOGM noted significant concerns regarding reserve/cuttings pit lining, management and reclamation. Pit contents with TDS in excess of 50,000 mg/l are possible, as such additional stipulations and precautions will be required.

Top 6-12" of top soils should be saved and stockpile on the east and southern sides of the well pad. All disturbed soils shall be seeded within 12 months of disturbance.

UDWR commented proposed site is located within Bighorn sheep lambing area. As such UDWR is recommending no drilling or construction activity from April 1st to June 15th. No raptor surveys have been conducted for surrounding sandstone outcrops. Given that suitable nesting

habitat is readily available raptor surveys should be completed.

Two Special Use Lease Agreements, SULA 1326 & SULA 1360 are located in close proximity to the proposed project site. Sites are referred to as the Boy Scout Camp and the Red Stewart Hunting Camp. Both leases have been notified of activity.

A water right is listed by the Utah Division of Water Rights within 1000' of the proposed project.

Bart Kettle  
**Evaluator**

3/4/2014  
**Date / Time**

**CONFIDENTIAL**



# Application for Permit to Drill

## Statement of Basis

### Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
9402	43019500490000	SITLA	OW	S	No
Operator	FIDELITY E&P COMPANY		Surface Owner-APD		
Well Name	Cane Creek 32-1-25-20		Unit		
Field	WILDCAT		Type of Work		DRILL
Location	SWSE 32 25S 20E S 452 FSL 2312 FEL GPS Coord (UTM) 610154E 4270986N				

#### Geologic Statement of Basis

Fidelity E&P Company proposes to drill the well to a total depth of 7,744' and plans to set surface casing from 0'-1,000'. The surface string will be drilled using an air mist. The proposed well would be spud in sandy soil that has been developed from the erosion of the Wingate Sandstone, which is exposed at the surface at this location. The well location is approximately three miles from the axis of the Cane Creek Anticline. It is reasonable to expect fractures & joints that may result in zones of lost circulation during drilling. There is one underground water right within one mile of the proposed location; SITLA has a water right for watering stock and culinary water. The water well is approximately 400 feet north of the proposed location and has a diameter of 6 inches and was drilled to a depth of 340'. It is likely that fresh water will be encountered at this location. The proposed casing and cementing program should adequately protect any useable groundwater resources encountered during the drilling of this well.

Ammon McDonald  
**APD Evaluator**

3/19/2014  
**Date / Time**

#### Surface Statement of Basis

On-site evaluation conducted March 4, 2014. In attendance: Bart Kettle-DOGM, Robby Edgel-UDWR, Jeff Conley-SITLA, Charlie Harrison-Harrison Oil Field Services, Dina Brown-Fidelity E&P Company, Lloyd-Fidelity E&P.

Proposed project is located in an environmentally sensitive region. National Parks, slick rock trails, river rafting and scenic views attract thousands of tourist to the region annually. Due to awareness of mineral exploration in the area it is reasonable to expect scrutiny of drilling operations for proposed project. Operator instructed to monitor drilling operations and ROW activity closely. Problems should be addressed immediately. Steps to limit activity during peak tourist season, and hours of the day are recommended.

A water right is listed with the Division of Water Rights within 1000' of proposed site. As such DOGM is requiring additional precautions for reserve pit and handling of salt laden and oil base mud cuttings. Slopes of pit walls should not exceed 2:1. Pits shall be lined as determined by site evaluation ranking. The geomembrane shall consist of 24 mil string reinforced LDPE or equivalent liner for reserve pit. The geomembrane liner should be composed of an impervious synthetic material resistant to hydrocarbons, salts and alkaline solutions.

Tanks and equipment handling or storing fluids will require 20 mil string reinforced

geomembrane liner. Liner should be placed over prepared surface containing 12" berms and key trench to secure liner.

Blasting is anticipated for reserve pit, fractured rock should be properly bedded with sand or a felt liner. Liner edges should be secured. Liner should be protected from fluid force or mechanical damage at points of discharge or suction.

Due to anticipated prolonged drilling operations precautions should be taken to prevent punctures from drilling related activities. Weekly inspection of liner should be conducted and recorded. Surface water run off should not be allowed to enter pits.

While drilling three sides of pits should be fenced. Fencing should include reinforced corner braces, 36" woven net wire on the bottom and two strands of barbed wire on top spaced at 6" apart. Following completion of drilling activities pits will require fencing on the fourth side, removal of free standing oil and netting to prevent entry by water fowl.

Pits will require reclamation to be completed one year following the removal of drilling rig. Reclamation measures shall be submitted to DOGM for approval following analysis of pit contents.

Utah Division of Wildlife (UDWR) is requesting seasonal closures from April 1st to June 15th for bighorn sheep lambing. Raptor surveys should be completed on suitable sites.

Access road should be routed around eligible cultural sites. Wash crossing shall be maintained and stabilized through all aspects of drilling and production.

SITLA noted well pad will require additional bonding due to site and volume of materials moved to construct well pad. Due to proximity to Boy Scout camp well pad should be fenced to secure site from investigating adolescent's.

Bart Kettle  
Onsite Evaluator

3/4/2014  
Date / Time

#### **Conditions of Approval / Application for Permit to Drill**

<b>Category</b>	<b>Condition</b>
Pits	A geomembrane liner with a minimum thickness of 20 mils shall be properly installed and maintained under pits, tanks and equipment storing or handling oil based drilling fluids or salt laden cuttings. Geomembrane liner shall consist of a string reinforced impervious synthetic material, resistant to hydrocarbons, salts and alkaline solutions.
Pits	A representative sample of drill cuttings shall be collected and analyzed prior to disposal at approved facility.
Pits	A closed loop mud circulation system is required while using oil based drilling mediums.
Pits	Reserve pit liner shall be protected from fluid force or mechanical damage at points of discharge or suction.
Pits	The Division shall be consulted prior to reclamation of reserve pit and drill cuttings.
Pits	Weekly inspections of liners shall be conducted and documented until materials are removed, or reserve pit is reclaimed.
Pits	Fractured rock in reserve pit area or oil based mud handling areas shall be properly bedded.
Pits	The reserve pit shall be fenced upon completion of drilling operations. Netting will be required over pit if it contains hydrocarbons or RCRA-exempt hazardous substances.
Surface	Access road and well pad shall have fresh water applied to control dust as needed.
Surface	Berm required around all equipment containing fluids.
Surface	Disturbed soils shall be seeded as part of interim reclamation within one year following construction of well pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	Access road shall be maintained and stabilized while drilling and through wells production phase.
Surface	Site shall be secured to prevent entrance of unauthorized personal.

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 2/11/2014

API NO. ASSIGNED: 43019500490000

WELL NAME: Cane Creek 32-1-25-20

OPERATOR: FIDELITY E&amp;P COMPANY (N3155)

PHONE NUMBER: 720 956-5763

CONTACT: Joy Gardner

PROPOSED LOCATION: SWSE 32 250S 200E

Permit Tech Review: ☒

SURFACE: 0452 FSL 2312 FEL

Engineering Review: ☒

BOTTOM: 0745 FNL 1173 FEL

Geology Review: ☒

COUNTY: GRAND

LATITUDE: 38.58052

LONGITUDE: -109.73535

UTM SURF EASTINGS: 610154.00

NORTHINGS: 4270986.00

FIELD NAME: WILDCAT

LEASE TYPE: 3 - State

LEASE NUMBER: ML-49667

PROPOSED PRODUCING FORMATION(S): CANE CREEK

SURFACE OWNER: 3 - State

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: STATE/FEE - 190017646/104891324☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: Municipal☒ RDCC Review: 2014-05-21 00:00:00.0☐ Fee Surface Agreement☐ Intent to Commingle

Commingle Approved

## LOCATION AND SITING:

☐ R649-2-3.

Unit:

☐ R649-3-2. General☐ R649-3-3. Exception☒ Drilling Unit

Board Cause No: R649-3-2.6

Effective Date:

Siting:

☐ R649-3-11. Directional DrillComments: Presite Completed  
TEMP 640 ACRE SPACING:Stipulations: 5 - Statement of Basis - bhill  
8 - Cement to Surface -- 2 strings - hmadonald  
12 - Cement Volume (3) - hmadonald  
21 - RDCC - dmason  
23 - Spacing - dmason  
26 - Temporary Spacing - dmason  
27 - Other - bhill

RECEIVED: May 27, 2014





GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** Cane Creek 32-1-25-20

**API Well Number:** 43019500490000

**Lease Number:** ML-49667

**Surface Owner:** STATE

**Approval Date:** 5/27/2014

### Issued to:

FIDELITY E&P COMPANY, 1801 California St. Ste 2500, Denver, CO 80202

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2.6. The expected producing formation or pool is the CANE CREEK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will be required to comply with any applicable recommendations resulting from this review. (See attached)

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing

a Request for Agency Action with the Board.

A temporary 640 acre spacing unit is hereby established in Section 32, Township 25 S, Range 20 E, SLB&M for the drilling of this well (R649-3-2.6). No other horizontal wells may be drilled in this section unless approved by the Board of Oil, Gas and Mining.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Cement volumes for the 13 3/8" and 9 5/8" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

Cement volume for the 7" production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 4069' MD as indicated in the submitted drilling plan.

**Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at <http://oilgas.ogm.utah.gov>

- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling

program

- contact Dustin Doucet

• 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours

- Dan Jarvis      801-538-5338 - office  
801-231-8956 - after office hours

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "J. Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-49667
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well		8. WELL NAME and NUMBER: Cane Creek 32-1-25-20
2. NAME OF OPERATOR: FIDELITY E&P COMPANY		9. API NUMBER: 43019500490000
3. ADDRESS OF OPERATOR: 1801 California St. Ste 2500 , Denver, CO, 80202		9. FIELD and POOL or WILDCAT: WILDCAT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0452 FSL 2312 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 32 Township: 25.0S Range: 20.0E Meridian: S		COUNTY: GRAND
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <b>5/30/2014</b>  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE  <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Fidelity E&P Company requests approvals to change the access road alignment across SITLA surface for the referenced well to insure a safer access that is shorter and minimizes drainage crossings. Cultural and paleontology clearance has previously been completed with reports submitted directly to the SITLA.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 June 03, 2014

NAME (PLEASE PRINT) Don Hamilton	PHONE NUMBER 435 650-3866	TITLE Permitting Agent (Star Point Enterprises, Inc.)
SIGNATURE N/A		DATE 5/27/2014



 **PROPOSED LOCATION**

**CANE CREEK UNIT #32-1-25-20  
SECTION 32, T25S, R20E, S.L.B.&M.  
451' FSL 2297' FEL**

DRAWN BY: L.S.

SCALE: 1:100,000

DATE DRAWN: 05-07-14

REV: 00-00-00

## ACCESS ROAD MAP

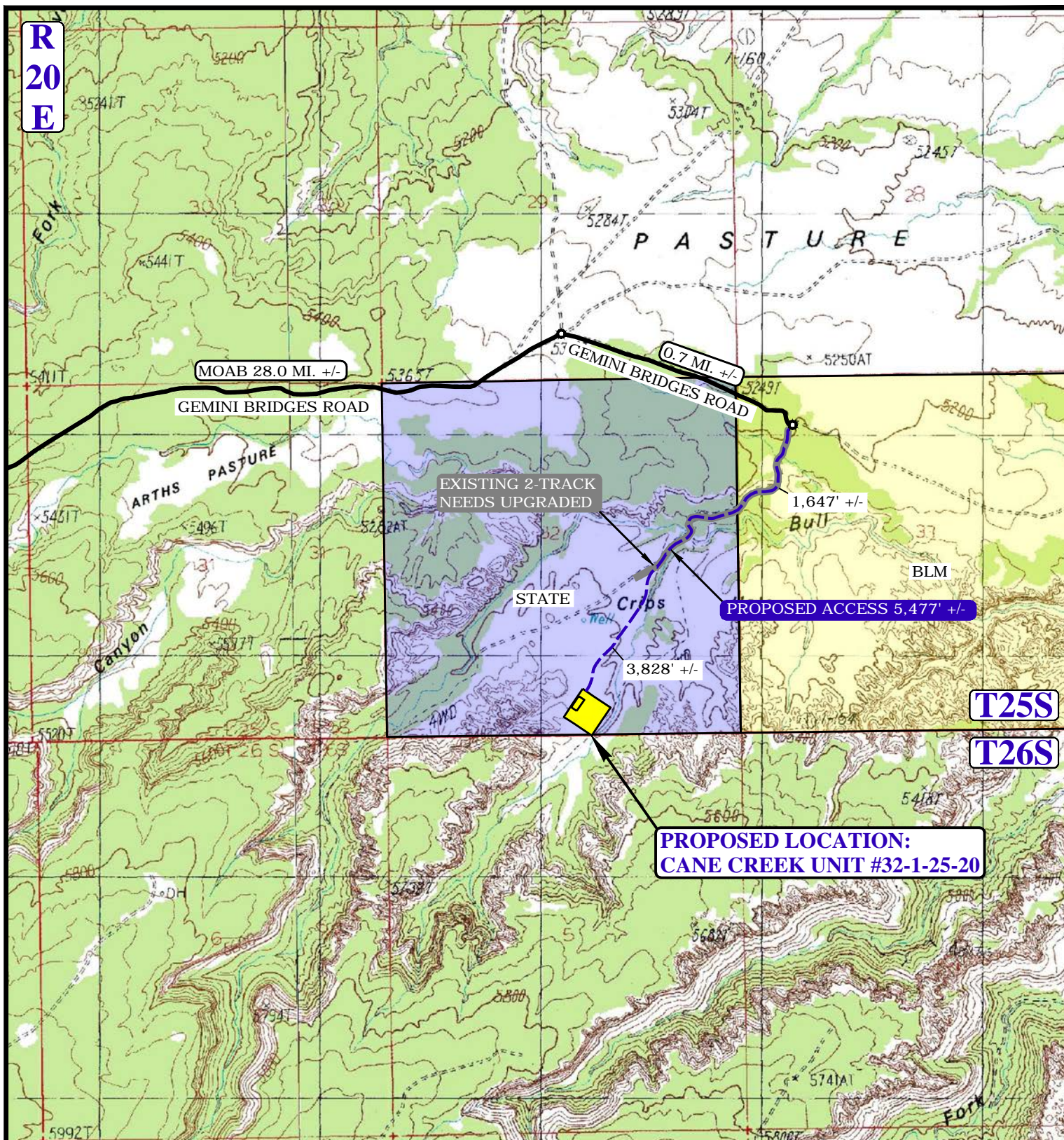
## TOPO A



**UELS, LLC**

**Corporate Office \* 85 South 200 East  
Vernal, UT 84078 \* (435) 789-1017**





NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

#### LEGEND:

- EXISTING ROAD
- PROPOSED ROAD
- EXISTING 2-TRACK

#### FIDELITY EXPLR. & PROD. CO.

CANE CREEK UNIT #32-1-25-20  
SECTION 32, T25S, R20E, S.L.B.&M.  
451' FSL 2297' FEL

DRAWN BY: L.S.

SCALE: 1" = 2000'

DATE DRAWN: 05-07-14

REV: 00-00-00

ACCESS ROAD MAP

TOPO B



**UELS, LLC**  
Corporate Office \* 85 South 200 East  
Vernal, UT 84078 \* (435) 789-1017





<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-49667
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> FIDELITY E&P COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1801 California St. Ste 2500 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> Cane Creek 32-1-25-20
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0452 FSL 2312 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 32 Township: 25.0S Range: 20.0E Meridian: S		<b>9. API NUMBER:</b> 43019500490000
<b>PHONE NUMBER:</b> 713 351-1968 Ext		<b>9. FIELD and POOL or WILDCAT:</b> WILDCAT
<b>COUNTY:</b> GRAND		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: <b>6/18/2014</b>	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 The Cane Creek 32-1-25-20 was spud on 6/18/2014. Set 110 ft of 20 inch conductor and cemented with 13 yds of Redimix cement.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 July 16, 2014

<b>NAME (PLEASE PRINT)</b> Sandi Stocker	<b>PHONE NUMBER</b> 720 931-9637	<b>TITLE</b> Engineering Tech
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/8/2014	

43 019 50049

# CANE CREEK UNIT # 32-1-25-20H

SW/SE Sec 32, T25S, R20E

GRAND COUNTY, UTAH

RECEIVED

AUG 13 2014

DIV. OF OIL, GAS & MINING



Accepted by the  
Utah Division of  
Oil, Gas and Mining

**FOR RECORD ONLY**

GEOLOGY REPORT  
by

Hal Schmidt  
Consulting Geologist  
Hal Schmidt LLC  
10 Heather Way  
Golden, Colorado 80401  
Bus: 303-279-4013  
Cell: 303-919-7822

Kent Roddy  
Consulting Geologist  
Kent Roddy, LLC  
2024 Colorado Ave.  
Rockford, Illinois 61108  
Cell: 406-370-5368



## GEOLOGICAL INTRODUCTION

RECEIVED

AUG 13 2014

The Fidelity Exploration & Production Co. Cane Creek Unit #32-1-25-20H, located in SW Section 32, T25S, R20E spud near the base of the Jurassic, Wingate Formation on June 28, 2014. It was drilled vertically to a depth of 6800' in Salt #18. The well was deviated from this kick off point to land with an inclination of 78 degrees at 7750' in the A zone of the Cane Creek Shale member of the Pennsylvanian Paradox Formation on July 10, 2014.

Electric logs were then run from intermediate casing depth of 4309' to maximum depth possible at 7448' in order to obtain lithology and petrologic information of clastic zones in the Paradox Formation.

At this point, the curve BHA was replaced with a lateral BHA containing an ipzig tool in order to obtain gamma data at the bit. Drilling of the horizontal lateral continued at 78 to 80 degrees through the Cane Creek, until at 9340' salt was encountered due to faulting. At 10,025', it was determined that the well bore was below the base of the Cane Creek Shale and an open hole sidetrack was in order.

Sidetrack #1 was then drilled forward from 8806' in the Cane Creek at an inclination of 90 degrees crossing a faulted zone at 9330' and then out the top of the Cane Creek into overlying Salt #21 at 9478'. Salt #21 was drilled to 9750' where the top of the Cane Creek was again penetrated. Drilling forward in the Cane Creek, the A1-SH was drilled and with an inclination of 79 to 77 degrees the bit became somewhat locked into following the northward dipping formation in the zone between the A1 and B1 black shale markers. At 11,000' the B1 shale was finally drilled when the hole inclination reached 73 to 74 degrees. Because much of the lateral was not in the desired optimum B zone target dolomite, the decision was made at 11,037' to drill sidetrack #2.

The BHA was pulled back to 8580' to drill Sidetrack #2. Information gained from the lateral and sidetrack #1 was important in guiding the steering of this sidetrack. As a result this lateral was steered with known targets to aim for which resulted in the sidetrack staying in the B zone dolomite for the entire lateral. Staying in the optimum potential reservoir zone paid off with this lateral having good shows and encountering fractures that were not seen by the other laterals. The best zone was encountered at 10,003' where the well took a 5 bbl gain before being shut in. Mud weight was raised and flow was routed through the MPD system and the gas buster. It was necessary to continue to hold pressure on the well head as it was drilled to total depth of 11,405'.

A 24 hour, two man geologist well site service began at 1090' on June 30, 2014 at base of surface casing. An MSI chromatograph was used to record total gas along with the various gas components of C-1 through C-4. The total gas readings were displayed on the rig electronic data recorder screen "Pason" for viewing by operating personnel at the rig. The total gas and the various gas components recorded were plotted at lagged depth to compile a permanent mudlog record of drilling parameters, lithology drilled along with hydrocarbon shows.

## **VERTICAL PILOT HOLE - LITHOLOGY DRILLED**

### **TRIASSIC, PERMIAN**

The well spudded in the basal Jurassic, Wingate Formation and was drilled with air & water to 1090' in the Permian Cutler Formation. Surface casing was set and cemented at 1078'. Geology service started at this depth. As drilling resumed, air & water continued to be used as a drilling medium. Samples were caught as air/water carrying cuttings, discharged from the bloop line muffler and into a series of settling tanks. A reserve pit was not used due to government restrictions. As air/water was employed as a drilling medium, the flow was not always consistent and some surging or unloading was present at various times. As a result, the basic lithology can be interpreted but detailed changes in lithology are highly generalized. From 1090' to 1150' the lithology consisted of orange-red siltstone and shale. Sandstone, orange-brown in color, fine to medium grained, with mica and orange feldspar grains was drilled from 1150 to 1290'. At 1290' to 1350' red-brown to orange brown shale was present. Sandstone with thin interbeds of shale was drilled from 1350' to 2000'. Shale was similar to above and Sandstone was consisted of fine to coarse grained quartz, generally red-brown to orange-brown in color, soft, mostly unconsolidated, calcareous, with mica and arkosic feldspar common.

The interval from 2000' to 2300' consisted of sandstone interbedded with conglomerate. Both were red-brown in color, with the sandstone being fine to medium grained, with black mica specks. The conglomerate was coarse to very coarse with large clear quartz and pink-orange feldspar grains and pebbles. The sand and conglomerate drilled up into loose grains with some calcareous cement on the grains and pebbles.

### **PENNSYLVANIAN**

#### **Honaker Trail Formation**

At 2300' the cuttings red color began slowly changing to gray. Here sandstone was white, very fine to medium grained, consisting of clear, frosted quartz with calcareous cement and containing black to gray mica specks.

The Honaker Trail formation was picked at 2426' based on the lithology changing from sandstone to limestone. At 2440' a water flow was noted by the driller, with the water probably coming out of the basal sandstones of the Cutler.

The limestone was gray-brown, to medium dark gray in color, very fine crystalline, slightly argillaceous with traces of micro- fossil debris. The overall color of the section being drilled continued to change from red to gray. Due to the high volume of air needed to keep the air hammer drilling and move water out of the hole, some up hole erosion occurs, which keeps some amount of red sediments present in the discharge stream.

At 2600' to 2700' a brown shaly siltstone was drilled. The siltstone grades to silty shale in part and contains distinctive gold colored mica flakes. From 2700' to 2950' limestone and sandstone is present. The limestone is dark gray to gray-brown, very fine to fine crystalline sometimes sub lithographic and

contains fossil fragments. Sandstone is light gray to slightly clear, very fine grained, calcareous and contains mica and some feldspar.

From 2950' to 3600', the section drilled is mostly limestone, light to medium gray, gray-brown, cream to white in color, very fine to micro crystalline with some scattered oolites and milky to gray chert.

### **Paradox Formation**

At 3600' black, organic, soft, dolomitic shale was present in the samples. This may indicate the top of the Paradox Formation. At 3790' the air hammer bit torqued up and quit as it drilled into what appeared to be a thin bed of solid gray chert,. The air hammer bit was tripped out of the hole and replaced by a tri-cone insert bit. Drilling proceeded using aerated water as a drilling fluid.

The top of the Paradox formation was predicted at 3763 by the prognosis but no definite sample top was picked by the wellsite geologist. Lithology consisted of limestone, light gray, tan, gray- brown in color, very fine to micro crystalline to dense with some interbeds of dark gray, black, carbonaceous shale present in the upper part

The Ismay member was picked at 3946' based on an increase in rate of penetration. The Ismay consisted of limestone, white to light gray, cream, dark gray in color, very fine crystalline, sandy to very sandy and was partly composed of clastic carbonate grains.

Salt #1 was encountered at 4008'. Due to drilling with aerated water, no salt was initially seen in samples as it dissolved before reaching the surface. By using a tri-cone bit, the top of the salt can be determined from the increase in drill rate, which is consistent and fast at close to 120 feet per hour. At 4050' and below, the water in the hole became salt saturated and salt samples reached the surface.

The top of Clastic #1 was drilled at 4195' and the base at 4285' based on drill time. Lithology consisted of dolomite, black shale and anhydrite but the samples were very poor. No gas increases were recorded.

Salt #2 at 4285' was drilled to 4321'. Intermediate 9 5/8" casing was then run to 4309', set and cemented. An 8 1/2 bit was run in the hole and cement, float and casing shoe was drilled along with an additional 10 feet of new formation to 4331 where a successful formation integrity test was run to 18 ppg EMW. The mud system was then converted to oil base invert and drilling of the hole continued with a PDC bit and directional BHA.

With the change to oil base mud, meaningful gas detection became possible because of the absence of air diluting the drilling fluid. While drilling ahead, gas increases were recorded from the various clastic zones that are sandwiched between bedded salt as follows:

Clastic # 2: Gas increased to 230 units at 4415' to 4440' from black shale and fractured light gray dolomite. The chromatograph indicated the gas was methane. Mud wt. was 14.0 ppg.

Clastic #8: .At 5488' to 5498', gas increased to 396 units from black shale and dolomite. Mud weight was 14.0 ppg and methane was identified.

Clastic # 9: A gas increase to 182 units from black shale and dolomite was recorded from 5684' to 5696. Methane was present and mud weight was 14.0 ppg.

Clastic #10: At 5786' to 5794', gas increased to 122 units from black shale.

Clastic #12: A gas increase to 642 units was recorded from 5976' to 5992'. The lithology consisted of black shale and dolomite. Methane, ethane and propane gases were present. Mud weight was 14.0 ppg. Mud weight was 14.0 ppg.

Clastic #16: Gas increased to 851 units at 6365' to 6400' from black shale, dolomite and fractured potash salt. Methane, ethane and propane gases were indicated by the chromatograph. After drilling this zone background gas remained high at 250 units, slowly decreasing to 100 units or less at 7100'.

Clastic #18-19: At 6876' to 6884' a 311 unit gas increase was recorded from dolomite and black, organic shale. Mud wt was 14.0 ppg

### **CANE CREEK SHALE 7665' md, 7398' tvd**

The Cane Creek Shale is divided into three zones termed A, B and C. The A zone comprises the upper one third of the Cane Creek Shale and is composed of alternating thin beds of anhydrite, black shale and dolomite. Anhydrite tends to predominate towards the top of this interval.

The B zone is composed of black, radioactive, carbonaceous, shale and light to medium gray, dolomite. This is the predominate lithology in the middle one third of the Cane Creek and is the principal productive interval in the Cane Creek.

The C zone comprises the lower one third of the Cane Creek and is generally dominated by anhydrite and dolomite with some thin organic black shale.

Drilling ahead the top of the Cane Creek was penetrated at 7665' md, 7398' tvd. The hole inclination at this depth was 74 degrees. While drilling through the upper Cane Creek A zone, background gas varied from 150 to 180 units. Gas increases were identified as generally coming from black organic shales and associated dolomite. Landing with a hole inclination of 78 degrees was at 7750' in the A zone. The curve BHA was tripped out of the hole and electric logs were run from the base of intermediate casing at 4309' to 7448' which was the maximum depth possible due to the inclination of the hole. Both a Triple combo and OBMI-Sonic Scanner were run. A cement bond log was run from base of casing to the surface.

### **HORIZONTAL LATERAL**

A lateral BHA with an ipzig gamma tool to record near bit gamma information was run in the hole and the Cane Creek Shale section was logged with the ipzig gamma tool prior to drilling ahead. Drilling continued forward through the A1 "warm" shale and B1 "hot" shale and into the B zone target dolomite at 7996'. Gas varied from 554 to 338 units. Mud weight varied from 14.3 to 14.2 ppg.

The well path followed the northward dipping B dolomite zone to 8250' where the dip flattened and background gas increased from 100 to 250 units. Gas increased to 866 units at 8325' and black shale was present in the samples along with a rare amount of calcite fracture fill. At 8470' gas increased to 2133 units then decreased to a steady background of 250 units. Lithology was 100% dolomite and the dip and hole inclination was essentially flat at 90 + degrees. At 8830' a 6 foot thick, low gamma reading



indicated either salt or anhydrite and a probable fault. Samples of the interval contained scattered pieces of salt. High gamma reading to 180 cps from 8836' to 8874' indicated B1 black shale based on its stratigraphic position above light gray dolomite indicative of the B zone target dolomite. Gas increased to 1700 units and appears to have been generated by drilling the black organic shale.

Drilling forward in the B zone target dolomite the formation dip steepened and the hole inclination followed at 86 to 78 degrees. An anhydrite gamma signature and anhydrite samples were logged at 9270' to 9304' and at 9340 salt was encountered. Due to drilling into this faulted zone, determining stratigraphic position became a guessing game. By drilling forward and steeping the hole inclination in excess of formation dip, it was determined that the bit was drilling below the base of the Cane Creek Formation. As a result, the BHA was pulled back to 8806' to drill open hole Sidetrack #1.

### **HORIZONTAL SIDETRACK #1**

Sidetrack #1 kicked off at 8824' drilled through the fault zone at 8830' and into the B zone target dolomite. Drilling forward at 90 deg. hole inclination, the bit drilled through the overlying B1 shale, A1 shale, a 40 thick salt zone, the remainder of the A zone and out the top of the Cane Creek and into Salt #21. Background gas was steady at 200 units, increasing to 600 to 1200 units in the area of the A1 shale. Salt #21 was drilled from 9478' to 9750'. Hole inclination upon re-entering the top of the Cane Creek was 83 degrees. The A zone was drilled and the A1 shale. Gas increased from the background 200 units to 400-600 units as black shale's were drilled. As drilling proceeded the bit became somewhat locked into the interval between the A and B shale's. Lithology was mostly dolomite with 5 to 20% black shale. The interval from 10490' to 11,037' total depth had a background gas of 600 units with scattered gas increases of over 1000 units. Bit inclination over this interval was 77 degrees which parallel formation dip. An increase in bit inclination from 77 to 73 degrees finally allowed the bit to drill deeper stratigraphically and the underlying B1 shale was finally penetrated at 11,000'.

Due to the poor shows in both laterals it was decided to try once more with another open hole sidetrack to get into the target dolomite zone and obtain a better evaluation of the area.

### **HORIZONTAL SIDETRACK #2**

Sidetrack #2 time drilled from 8580' to 8596' in order to kick off this 2<sup>nd</sup> open hole sidetrack in the B zone target dolomite. Drilling forward at 87 deg. hole inclination near the base of the B zone the upper part of the C 1 anhydrite was drilled from 8870' to 8810'. A fault zone containing salt was drilled from 8810' to 8840'. Drilling forward in the B zone target dolomite a 2430 unit gas increase at 9090' caused the flow to be diverted through the gas buster and the MPD system. Gas remained elevated at 1400 to 2000+ units to 9500'. At 9500' to 9890' gas was 1200 units to 1000 units. Gas increased to 1500 units and then to 3600 units from 9890 to 10003 where the well kicked and a 5 bbl gain was noted. Drilling was halted to circulate out gas and raise the mud weight from 14.3 to 15.3. A 25'+ flare above the flare stack was noted by the wellsite geologist. MPD pressure held on the well head varied from 800 to 460 psi.

Gas continued to remain high as drilling resumed with 3000 to 4000 units of gas and 5' to 15' flares. At 10,031' it was again necessary to pull off bottom and raise the mud wt. to 15.3 and then to 15.6/15.8 to control the well. Gas continued to remain above 2500 units to 3500 units along with a constant flare

while drilling ahead in the B zone dolomite to 10,570'. MPD pressure held on the well averaged 300 psi. At this point mud weight of 15.8 began to take effect and gas declined to the 2000 unit range. From 10,840' to 11,050' gas again increased to the 3000 unit range with a small flare. Gas remained in the 2000+ unit range for the remainder of the lateral to total depth of 11,405'.

### **CONCLUSION**

Three laterals were drilled through the Cane Creek Shale, in the same direction and very close to each other. The third one drilled, Sidetrack #2 encountered oil filled fractures and stayed in the optimum stratigraphic unit for production, the B zone dolomite. At this point it is speculation to determine the production potential of this lateral but indications are that it will be commercial.

A conclusion one can draw from this well is that fractures are not predictable at this point in the development of the field. By continuing to probe with an additional lateral when the first two were disappointing and having success, sends a message that one or two laterals in an area does not condemn an area. Wells should be permitted to include multiple laterals in various directions and inclination so that fractures can be found and exploited by the drill bit.

Hal Schmidt, Geologist, LLC

10 Heather Way,

Golden, CO 80401

[hasgeo@q.com](mailto:hasgeo@q.com)

303-279-4013 office/home

303-919-7822 cell

**Formation Tops**  
**Fidelity CCU#32-1-25-20H**

Elevation KB	5251'	5,251'	5251'		
FORMATION	Prognosis Depth	Prognosis Subsea	Sample top	Subsea	
/ ZONE					
Chinle	138'	5,113'	n/a		
Moenkopi	413'	4,838'	n/a		
Cutler	813'	4,438'	n/a		
Honaker Trail	2,263'	2,988'	2,426'	2,825'	
Paradox Formation	3,763'	1,488'	n/a	n/a	
Salt 1	3,948'	1,303'	4,008'	1,243'	
Clastic 1	4,198'	1,053'	4,195'	1,056'	
Salt 2	4,288'	963'	4,285'	966'	
Intermediate Casing Pt.	4,308'	943'	4,309'	942'	
Clastic 2	4,393'	858'	4,382'	869'	
Salt 3	4,453'	798'	4,466'	785'	
Clastic 3	4,607'	644'	4,608'	643'	
Salt 4	4,642'	609'	4,643'	608'	
Clastic 4	4,757'	494'	4,757'	494'	
Salt 5	4,819'	432'	4,821'	430'	
Clastic 5	5,089'	162'	5,089'	162'	
Salt 6	5,109'	142'	5,111'	140'	
Clastic 6	5,199'	52'	5,208'	43'	
Salt 7	5,207'	44'	5,216'	35'	
Clastic 7	5,357'	-106'	5,293'	-42'	
Salt 8	5,390'	-139'	5,339'	-88'	
Clastic 8	5,523'	-272'	5,476'	-225'	
Salt 9	5,556'	-305'	5,512'	-261'	
Clastic 9	5,721'	-470'	5,676'	-425'	
Salt 10	5,753'	-502'	5,710'	-459'	
Clastic 10	5,828'	-577'	5,775'	-524'	
Salt 11	5,883'	-632'	5,826'	-575'	
Clastic 11	5,933'	-682'	5,880'	-629'	
Salt 12	5,943'	-692'	5,894'	-643'	
Clastic 12	6,028'	-777'	5,970'	-719'	
Salt 13	6,048'	-797'	6,002'	-751'	
Clastic 13	6,148'	-897'	6,098'	-847'	
Salt 14	6,160'	-909'	6,113'	-862'	
Clastic 14	6,203'	-952'	6,155'	-904'	
Salt 15	6,225'	-974'	6,179'	-928'	
Clastic 15	6,365'	-1,114'	6,315'	-1,064'	
Salt 16	6,375'	-1,124'	6,324'	-1,073'	
Clastic 16	6,415'	-1,164'	6,365'	-1,114'	
Salt 17	6,425'	-1,174'	6,371'	-1,120'	
Clastic 17	6,635'	-1,384'	6,581'	-1,330'	
Salt 18	6,646'	-1,395'	6,600'	-1,349'	
Clastic 18-19	6,921'	-1,670'	6,870'	-1,619'	
Salt 20	6,972'	-1,721'	6,916'	-1,665'	
Clastic 20	7,112'	-1,861'	7,107'	-1,856'	
Salt 21	7,120'	-1,869'	7,118'	-1,867'	
Top Cane Creek Shale	7,340'	-2,089'	7,665'	-2,414'	

**OPERATOR:** FIDELITY EXPLORATION & PRODUCTION CO.

**ADDRESS:** 1801 California St., Suite 2500, Denver, CO. 80202

**WELL NAME:** CANE CREEK UNIT # 32-1-25-20H

**API#:** 43-019-50049

**SURFACE LOCATION:** 451' FSL & 2297' FEL,  
SW/SE SEC 32, T25S, R20E

**FIELD:** Cane Creek Unit

**COUNTY.STATE** Grand, Utah

**BASIN:** Paradox

**WELL TYPE:** Development

**BASIS OF PROSPECT:** Proximity to Cane Creek oil production

**ELEVATION:** GL: 5228', KB: 5251' ( UnGraded)

**SPUD DATE** June 28, 2014

**TD DATE:** July 25, 2014

**HORIZONTAL TARGET:** Paradox, Cane Creek Shale

**KICK-OFF POINT:** 6800' md, 6799' tvd

**TOTAL DEPTH:** 11,405' md, 7855.86' tvd



**TVD AT TD:** 7855.86'

**BOTTOM HOLE LOCATION:** 857' FNL, 1084' FEL, SW NE SEC. 32, T25S, R20E

**FINAL VERTICAL SECTION:** 4152.56'

**FINAL CLOSURE AZIMUTH:** 16.98 deg  
**PROPOSED AZIMUTH:** 14.89 deg.  
**TOTAL DRILLING DAYS** 28

**STATUS OF WELL:** Waiting Completion

**CONTRACTOR:** Nabors Rig M40

**TOOLPUSHER:** Shannon McDaniel, Brendon Evans

**FIELD SUPERVISORS:** Paul Roberts, Sam Larado, Tucker Yancey, Marvin VanAllen

**MUD COMPANY:** NOV Fluid Control  
Eric Mascarenas, Paul McCracken, Clark Sievers, Mike Whitt

**MUD TYPE:** Air/Mist, Water, Invert

**WELLSITE GEOLOGISTS:** Hal Schmidt, Kent Roddy  
**MUDLOGGER:** Andrew Schmidt  
**PROSPECT GEOLOGIST:** Robert Flook, Dave Koval, Jen VanHolland, Chris Lang, Fidelity.

**ROCK SAMPLING:** 30' Lagged Samples  
Two sets of dry sample cuts were collected.

**DIRECTIONAL DRILLERS:** Pathfinder  
Todd Bratten, Jacob Hofer

**MWD:**

Pathfinder  
Stewart Robertson, Dustin Easley

**CASING:**

20" Conductor @ 128': 13 3/8" @ 1,090'  
9 5/8" @ 4,309': 7" @ 11,405'

**HOLE SIZE:**

17 1/2" base 20" conductor 128' to 1090'  
12 1/4" 1,090' to 4,321'  
8 1/2" 4,321' to 11,405'

**CORES and DST's:**

None

**WIRELINE/OPEN HOLE LOGS:**

Triple Combo, OBMI/Sonic Scanner , 4460' to 7672' - Pilot Hole  
CBL/GR, 4465' to 1201'

**KEY WELL**

Davis Oil Co. Skyline Unit #1, 1982  
SE/NW Sec 5, T26S, R20E

**DAILY DRILLING SUMMARY**  
**FIDELITY EXPLORATION AND PRODUCTION**  
**CANE CREEK UNIT # 32-1-25-20H**

DAY	DATE 2014	DEPTH 06:00 HRS	24 HR FOOTAGE	BIT #	Mud Losses	24 HR ACTIVITY	FORMATION
1	30-Jun	1,090'	0'	n/a	n/a	Nipple up BOP equipment and pressure test BOP. Pick up drill pipe, stand in derrick.	Moenkopi
2	1-Jul	1,090'	0'	2	0	Finish testing BOP. Pick up Hammer bit & BHA. TIH, blowing hole dry at ~625', RIH to 1018', blow hole dry. Rebuild air line from air jammers to standpipe. Drill cement and shoe to 1090'. Drill vertical section with air mist from 1090' to 2180'.	Cutler
3	2-Jul	2,180'	1,090'	2	0	Drill vertical section with air/mist from 2180' to 3430'.	Honaker
4	3-Jul	3,430'	1,250'	2	0	Drill vertical section with air/mist from 3430' to 3792'. Blow hole, TOOH, lay down air hammer & BHA. Pick up Tri-Cone/insert bit, mud motor & new BHA, TIH. Drill vertical section with aerated water from 3792' to 3962'.	Honaker
5	4-Jul	3,962'	542'	3	0	Drill with aerated water from 3962' to 4321', Intermediate Casing Point, circulate, TOH to 3050', TIH, blow hole clean, TOOH for casing. Run 9 5/8" casing	Paradox
6	5-Jul	4,321'	359'	4	0	Cement 9 5/8" casing. Run Gyro, pressure test casing, Pick up drill pipe, rack in derrick. Pick up 8 1/2" Tri-Cone bit & BHA, pick up drill pipe, POOH racking stands in derrick, TIH	Cutler
7	6-Jul	4,321'	0'	4	0	TIH, drill cement and 10' formation from 4321' to 4331' with water, FIT test to 18.0 EMW. Change from water to OBM. TOOH, lay down bit & BHA. Pick up new PDC bit, BHA with directional tools/curve assembly, TIH. Drill from 4331' to 4370'	Paradox
8	7-Jul	4,370'	49'	5	0	Drill vertical section from 4370' to 5553' with OBM	Paradox
9	8-Jul	5,553'	1,183'	5	0	Drill vertical section from 5553' to 6800' with OBM. Drill curve section from 6800 to 6844' with OBM.	Paradox

**DAILY DRILLING SUMMARY**  
**FIDELITY EXPLORATION AND PRODUCTION**  
**CANE CREEK UNIT # 32-1-25-20H**

DAY	DATE 2014	DEPTH 06:00 HRS	24 HR FOOTAGE	BIT #	Mud Losses	24 HR ACTIVITY	FORMATION
10	9-Jul	6,844'	1,291'	5	0	Drill curve section from 6844' to 7433' with OBM	Paradox
11	10-Jul	7,433'	589'	5	0	Drill curve section from 7433' to 7750', circulate, POOH to top of curve, TIH, circulate, TOOH for E-Logs	Paradox
12	11-Jul	7,750'	0'	6	0	Rig up and run Schlumberger E-Logs, Triple combo & Sonic. Rig and run CBL log, pick up bit & lateral BHA, TIH	Paradox
13	12-Jul	7,750'	951'	6	0	TIH, Re-log hole with Pzig gamma tool from 7424' to 7750'. Drill lateral from 7750' to 8701'	Paradox
14	13-Jul	8,701'	785'	6	0	Drill lateral from 8701' to 9046', circulate and work on Pump #2. Drilling ahead from 9046' to 9486', rotating & sliding with surveys.	Paradox
15	14-Jul	9,486'	539'	6	10	Drill lateral from 9486' to 9497', circulate, work on Pump #2. Drilling ahead from 9497' to 10025', circulate, work on Pump #2. Wait on decision to drill, POOH to 8808' work pipe, troughing before starting Sidetrack #1.	Paradox
16	15-Jul	8,809'	466'	6	0	Time drill from 8808' to 8824' for Sidetrack #1. Drilling ahead from 8824' to 9228', sliding & rotating with surveys	Paradox
17	16-Jul	9,228'	544'	6		Drill lateral, Sidetrack #1 from 9228' to 9920', sliding & rotating with surveys	Paradox
18	17-Jul	9,920'	551'	6	0	Drill lateral Sidetrack #1 from 9920' to 10167', work on Pumps. Drill lateral from 10167' to 10740', sliding & rotating with surveys	Paradox
19	18-Jul	10,740'	18'	6	0	Drill lateral from 10740' to 11037', sliding & rotating with surveys. POOH to ~8500', begin troughing for Sidetrack #2. Time drill from 8580' to 8583'	Paradox
20	19-Jul	8,583'	489'	6	18	Time drill from 8583' to 8596' for Sidetrack #2. Drilling ahead from 8596' to 8893', sliding and rotating with surveys	Paradox
21	20-Jul	8,383'	589'	6	0	Drill lateral Sidetrack #2 from 8893' to 9182', work on pumps & repair stand pipe line. Drill lateral from 9182' to 9305', rotating & sliding with surveys.	Paradox
22	21-Jul	9,305'	405'	6	0	Drill lateral from 9305' to 10003', take gas kick of ~3900 units, circulate & raise mud weight from 14.3 to 15.2 ppg.	Paradox
23	22-Jul	10,003'	517'	6	0	Drill lateral from 10003' to 10212', raising mud weight to 15.5 ppg, change rubber rotating head at 10212'. Drill lateral from 10212' to 10413'.	Paradox
24	23-Jul	10,413'	446'	6	0	Drill lateral from 10413' to 10822', rotating & sliding with surveys.	Paradox
25	24-Jul	10,822'	216'	6	0	Drill lateral from 10822' to 11400', rotating & sliding with surveys. Electrical problems on shakers, bypassed shaker with MSI gas detector, using Pason Total Gas detector from 11085' to 11196', when electrical problems are fixed.	Paradox



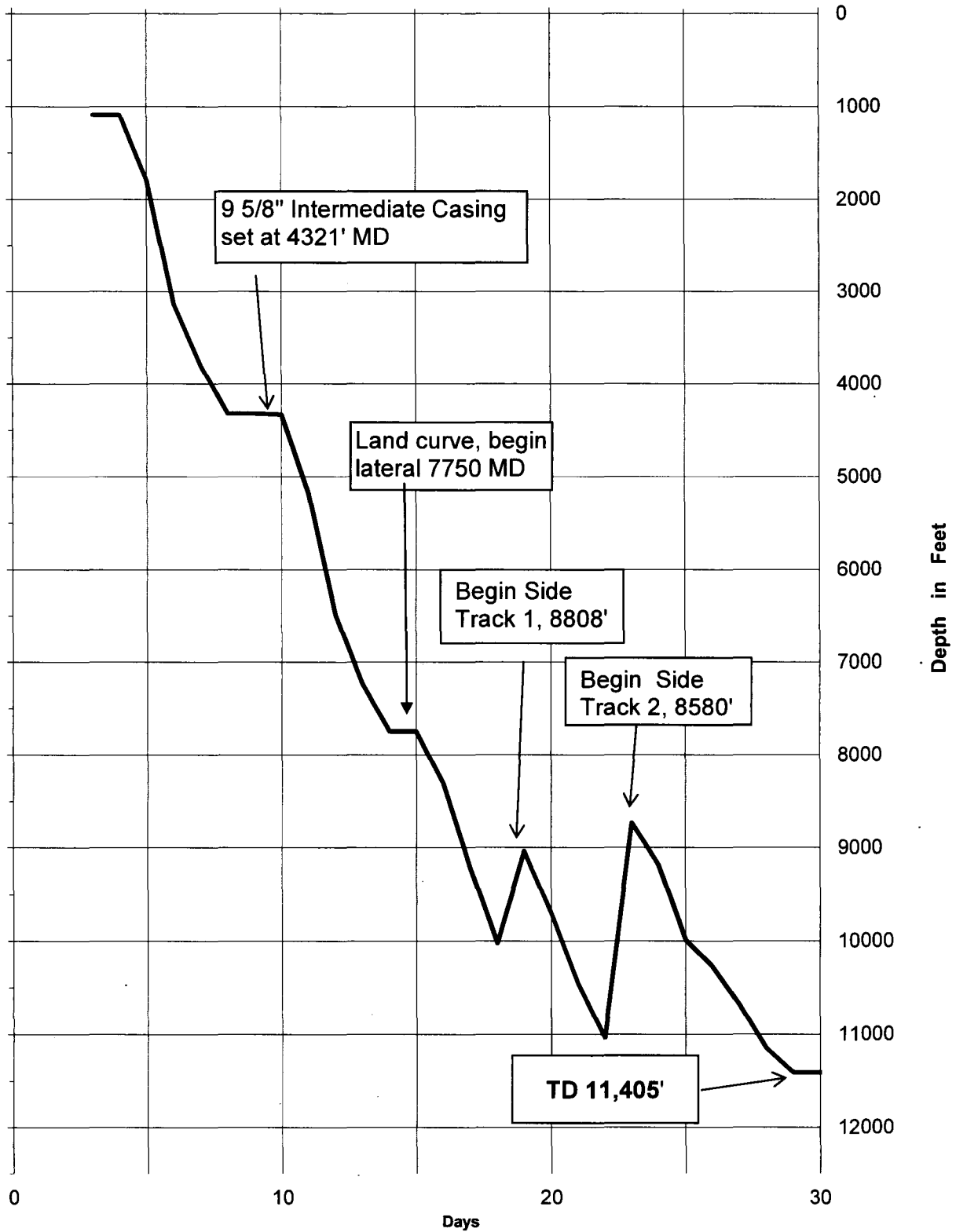
**DAILY DRILLING SUMMARY**  
**FIDELITY EXPLORATION AND PRODUCTION**  
**CANE CREEK UNIT # 32-1-25-20H**

DAY	DATE 2014	DEPTH 06:00 HRS	24 HR FOOTAGE	BIT #	Mud Losses	24 HR ACTIVITY	FORMATION
26	25-Jul	11,250'	281'	6	0	Drill lateral from 1125' to 11405', TD ~14:20, 7/25. Circulate, change rubber rotating head. POOH to top of ST2 lateral kick off point ~8580', attempted to work pipe, mud motor failed, stripped out to 7700'.	Paradox
27	26-Jul	11,405'	0'	7	0	At 7700' changed over to 18.0 ppg kill wt. mud, displace 15.8 mud in hole with KWM, trip out of hole, lay down lateral BHA, P. U. bit, new motor, MWD & BHA, TIH to 6490'.	Paradox
28	27-Jul	11,405'	0'	7	0	Continue TIH to 7700', displace 18 ppg KWM with 15.8 drilling mud. Trip in to 8580' work sidetrack area until drill string slides into correct hole.	Paradox
29	28-Jul	11,405'	0'	7	0	Trip in hole to bottom, circ. hole clean, trip gas 3890 units w/15-25' flare, change out failed rotating rubber, circulate out downtime gas of 4000 units w/ 5' flare. Raise mud wt. to 16.3+, trip out to 7700' racking back stds, displace hole with 18 ppg kill wt mud, trip out laying down drill pipe.	Paradox
30	29-Jul	11,405'	0'	7	0	Trip out of hole, laying down drill pipe, lay down directional tools, make up bit, bit sub, TIH with rest of drill pipe, trip out laying down drill pipe, pull wear bushing, rig up casing tongs and equipment.	Paradox
31	30-Jul	11,405'	0'	7	0	Run 7" casing, rig down casers. Circulate casing on bottom, displace 18.0 ppg mud with 16.3 ppg mud.	Paradox
32	31-Jul	11,405'	0'	7	0	Finish displacing 18.0 ppg mud. Rig up cementers, Cement 7" casing in hole, Geologists released	Paradox

Feet Per Day  
Fidelity Exploration Production Co  
Cane Creek Unit 32-1-25-20H

Date	Day	Depth 12am	Footage
6/30/2014	1	1090	0
7/1/2014	2	1090	0
7/2/2014	3	1792	702
7/3/2014	4	3136	1344
7/4/2014	5	3802	666
7/5/2014	6	4321	519
7/6/2014	7	4321	0
7/7/2014	8	4331	10
7/8/2014	9	5170	839
7/9/2014	10	6483	1313
7/10/2014	11	7240	757
7/11/2014	12	7750	510
7/12/2014	13	7750	0
7/13/2014	14	8306	556
7/14/2014	15	9213	907
7/15/2014	16	10025	812
7/16/2014	17	9035	-990
7/17/2014	18	9706	671
7/18/2014	19	10450	744
7/19/2014	20	11037	587
7/20/2014	21	8732	-2305
7/21/2014	22	9182	450
7/22/2014	23	9989	807
7/23/2014	24	10273	284
7/24/2014	25	10676	403
7/25/2014	26	11146	470
7/26/2014	27	11405	259
7/27/2014	28	11405	0
7/28/2014	29	11405	0
7/29/2014	30	11405	0
7/30/2014	31	11405	0
7/31/2014	32	11405	0

TIME VS DEPTH  
FIDELITY EXPLORATION AND PRODUCTION  
CANE CREEK UNIT # 32-1-25-20H



BIT RECORD  
FIDELITY EXPLORATION AND PRODUCTION  
CANE CREEK # 32-1-25-20H

OPERATOR: FIDELITY EXPLORATION & PRODUCTION CO.	CONTRACTOR: Nabors Rig M40	SPUD DATE: June 26, 2014
WELL NAME: CANE CREEK UNIT # 32-1- 25-20H	RIG MAKE: Loadmaster 142' 550K 1500 HP	26 JUNE. 2014
LOCATION: SW/SE SEC 32, T25S, R20E	PUMPS: 2 H&H 1600 12"	TD DEPTH/ DATE: 11405'/ July 25, 2014
GROUND LEVEL: 5,228' (meas. ungraded)		11405'/ 25 JULY 2014
KELLY BUSHING: 5,251' (meas. ungraded)		

Bit #	Size	Make	Type	Jets	Serial #	Depth In	Depth Out	Ftg	Hours	Ft/Hr	Vert. Dev.
1	17.5"	Numa	N125		209086	130'	1,090'	960'	14	5.7	0-1
2	12.25"	Numa	N125	11/11/11/11	211775	1,033'	3,792'	2,702'	34	36.0	0-1
3	12.25"	Reed	R40AP	20/20/20	D172977	3,792'	4,321'	529'	12	46.3	0-3
4	8.5"	Baker-Hughes	GX-C1V	22/22/22	5229416	4,321'	4,331'	10'	0.25	40.0	0-1
5	8.5"	Security	MMD64M	6 X 18	12148898	4,331'	7,750'	3,419'	65.5	72.6	4-78
6	8.5"	Security	MMD64M	6 X 18	12232820	7,750'	15,074'*	7324'*	226.5*	32.3	78-90
6 LAT	8.5"	Security	MMD64M	6 X 18	12232820	7750	10,025'	2,275'	lateral		78-90
6 ST1	8.5"	Security	MMD64M	6 X 18	12232820	8808	11,037'	2,229'	sidetrack #1		74-92
6 ST2	8.5"	Security	MMD64M	6 X 18	12232820	8580	11,405'	2,825'	sidetrack #2		75-89

\* Total footage, depth and hours of Bit #6 drilling 1 lateral and 2 side tracks

**FIDELITY EXPLORATION AND PRODUCTION  
INVERT MUD REPORTS  
CANE CREEK UNIT # 32-1-25-20H**

DATE 2014	DEPTH	Flow Line Temp	WT	FV	PV	YP	GELS	API FILT	OIL/WATER	ELECTRIC STABILITY	CORRECTED SOLIDS	NaCl % wt	CaCl2 % wt	MgCl2 % wt	24 HOUR MUD LOSSES
6-Jul	4331	100	14.60	58	36	16	12/21	2	86.8/13.2	808	30.20	0.30	37.4	1.30	0
7-Jul	4633	110	14.20	52	22	14	10/16	2	85.7/14.3	733	28.10	0.90	35.7	1.20	0
8-Jul	5975	115	14.00	46	25	15	12/18	2	86.6/13.4	840	27.00	0.30	36.00	2.60	0
9-Jul	6945	120	14.00	45	22	14	11/16	2	87.1/12.9	840	28.00	0.00	36.90	2.60	0
10-Jul	7715	125	14.00	45	23	14	11/16	2	86.4/13.6	844	28.00	1.80	35.00	2.50	0
11-Jul	7750	n/a	14.65	47	25	15	12/18	2	85.3/14.7	828	29.90	1.60	34.8	3.00	0
12-Jul	7904	125	14.20	45	25	13	10/16	2	85.7/14.3	744	27.90	1.90	34.7	3.00	0
13-Jul	9047	135	14.00	46	28	14	12/19	2	85.7/14.3	718	27.90	1.60	35.8	2.40	0
14-Jul	9870	120	14.00	45	25	14	10/16	2	84.5/15.5	630	27.00	2.50	32.9	1.70	0
15-Jul	8,822	122	14.00	45	27	14	9/15	2	83.1/16.9	600	26.90	3.10	31.3	1.60	86
16-Jul	9442	136	14.00	45	28	13	10/13	2	83.1/16.9	576	26.30	1.90	34.8	4.20	0
17-Jul	10167	136	13.95	47	29	14	10/13	2	83.1/16.9	538	26.50	2.20	33.80	3.10	0
18-Jul	10998	135	14.00	47	28	14	10/13	2	82.5/17.5	578	25.80	2.50	32.8	4.10	0
19-Jul	8595	136	14.20	46	29	13	10/13	2	82.9/17.1	557	27.70	3.00	31.6	2.60	151
20-Jul	9182	136	14.25	46	30	13	10/13	2	82.1/17.9	525	27.30	2.20	33.8	3.60	0
21-Jul	9708	136	14.25	47	32	15	10/14	2	81.4/18.6	520	27.20	2.10	34.1	4.10	0
22-Jul	10144	130	15.60	50	34	20	11/16	2	83.8/16.2	634	32.90	1.90	34.5	2.30	0
23-Jul	10561	138	15.80	55	36	23	12/16	2	84.4/15.6	641	33.80	1.50	36.2	3.00	0
24-Jul	10999	138	15.80	56	40	25	13/18	2	85.2/14.8	605	34.10	1.40	36.4	0.60	0
25-Jul	11405	139	15.80	55	40	25	14/18	2	84.5/15.5	585	33.30	2.30	33.6	3.70	0
26-Jul	11405	n/a	16.10	56	41	24	13/17	2	84.9/15.1	635	34.80	1.80	34.9	3.80	0
27-Jul	11405	n/a	15.90	58	41	23	13/17	2	85/15	640	34.30	1.80	34.9	3.80	0
29-Jul	11405	n/a	16.40	63	44	23	13/17	2	84.7/15.3	674	36.10	2.00	34.5	2.60	0



FIDELITY EXPLORATION AND PRODUCTION  
DISTRIBUTION  
CANE CREEK UNIT # 32-1-25-20H

<b><u>DISTRIBUTION</u></b>	<b>Geological Report</b>	<b>Final Mud Log prints</b>	<b>Digital mud log</b>	<b>Well Cuttings</b>
Fidelity Exploration and Production Co. Jenifer Van Holland Geologist 1801 California St., Ste. 2500 Denver, CO 80202	1	1	1	0
Fidelity Exploration and Production Co. Bob Flook Geologist 1801 California St., Ste. 2500 Denver, CO 80202	1	1	1	0
Fidelity Exploration and Production Co. Dave Koval Geologist 1801 California St., Ste. 2500 Denver, CO 80202	1	1	1	1
State of Utah Division of Oil, Gas & Mining P.O. Box 145801 1594 W. Temple St., Ste. 1210 Salt Lake City, UT 84114-5801	1	0	1	1
Bureau of Land Management Moab Field Office 82 E. Dogwood Moab, UT 84532	1	0	0	0

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-49667
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> FIDELITY E&P COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1801 California St. Ste 2500 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> Cane Creek 32-1-25-20
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0452 FSL 2312 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 32 Township: 25.0S Range: 20.0E Meridian: S		<b>9. API NUMBER:</b> 43019500490000
<b>PHONE NUMBER:</b> 713 351-1968 Ext		<b>9. FIELD and POOL or WILDCAT:</b> WILDCAT
<b>COUNTY:</b> GRAND		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 8/25/2014	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Cane Creek 32-1-25-20 had first production on 8/25/14. 190 BO		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> September 03, 2014		
<b>NAME (PLEASE PRINT)</b> Sandi Stocker	<b>PHONE NUMBER</b> 720 931-9637	<b>TITLE</b> Engineering Tech
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/3/2014	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-49667
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> FIDELITY E&P COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1801 California St. Ste 2500 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> Cane Creek 32-1-25-20
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0452 FSL 2312 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 32 Township: 25.0S Range: 20.0E Meridian: S		<b>9. API NUMBER:</b> 43019500490000
<b>PHONE NUMBER:</b> 713 351-1968 Ext		<b>9. FIELD and POOL or WILDCAT:</b> WILDCAT
<b>COUNTY:</b> GRAND		<b>STATE:</b> UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>9/24/2014</b>	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input checked="" type="checkbox"/> <b>OTHER</b> OTHER: <span style="border: 1px solid black; padding: 2px;">Install Artificial Lift</span>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Fidelity is submitting notice of our intent to install an artificial lift system on the Cane Creek 32-1-25-20. Fidelity would like to install a conventional beam pumping unit system. Fidelity is in the process of evaluating the effectiveness of recent hydraulic rod lift installations. Preliminary learnings are showing that high maintenance requirements on some units are causing well downtime, and may not be a suitable long term lift method. The conventional pumping unit system has a low visual impact of 21 ft at the walking beam. Fidelity has committed to limiting the visual and noise impact of all artificial lift systems in the Paradox field.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**

**Date:** October 07, 2014  
**By:** *D. K. Duff*

<b>NAME (PLEASE PRINT)</b> Sandi Stocker	<b>PHONE NUMBER</b> 720 931-9637	<b>TITLE</b> Engineering Tech
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/17/2014	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-49667
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> FIDELITY E&P COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1801 California St. Ste 2500 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> Cane Creek 32-1-25-20
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0452 FSL 2312 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWSE Section: 32 Township: 25.0S Range: 20.0E Meridian: S		<b>9. API NUMBER:</b> 43019500490000
<b>PHONE NUMBER:</b> 713 351-1968 Ext		<b>9. FIELD and POOL or WILDCAT:</b> WILDCAT
<b>COUNTY:</b> GRAND		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/27/2014	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER	
	<input checked="" type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> APD EXTENSION	
	OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Produced water generated from this well is disposed of either at the Fidelity-operated Kane Springs 16-1 injection well or the commercial Danish Flats facility in Grand County, Utah.		
<b>NAME (PLEASE PRINT)</b> Sandi Stocker		<b>PHONE NUMBER</b> 720 931-9637
<b>SIGNATURE</b> N/A		<b>TITLE</b> Engineering Tech
<b>DATE</b> 10/27/2014		

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 October 29, 2014

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ FORM 8  
(highlight changes)

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

<b>1a. TYPE OF WELL:</b> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-49667
<b>b. TYPE OF WORK:</b> NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b>  
<b>2. NAME OF OPERATOR:</b> Fidelity E&P Company		<b>7. UNIT or CA AGREEMENT NAME</b>  
<b>3. ADDRESS OF OPERATOR:</b> 1801 California St, STE 210 CITY Denver STATE CO ZIP 80202		<b>8. WELL NAME and NUMBER:</b> Cane Creek 32-1-25-20
<b>4. LOCATION OF WELL (FOOTAGES)</b> AT SURFACE: 451' FSL 2297' FEL  AT TOP PRODUCING INTERVAL REPORTED BELOW: 972' FSL 2162' FEL Sec 32  AT TOTAL DEPTH: 877' FNL 1005' FEL Sec 32		<b>9. API NUMBER:</b> 4301950049
<b>10. FIELD AND POOL, OR WILDCAT</b> Wildcat		<b>11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> SWSE 32 25S 20E S
<b>12. COUNTY</b> Grand		<b>13. STATE</b> UTAH

<b>14. DATE SPURRED:</b> 6/18/2014	<b>15. DATE T.D. REACHED:</b>  	<b>16. DATE COMPLETED:</b> 8/24/2014	ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>	<b>17. ELEVATIONS (DF, RKB, RT, GL):</b> 5231
<b>18. TOTAL DEPTH:</b> MD 11,405 TVD 7,856	<b>19. PLUG BACK T.D.:</b> MD TVD	<b>20. IF MULTIPLE COMPLETIONS, HOW MANY? *</b> NO		<b>21. DEPTH BRIDGE MD PLUG SET:</b> MD TVD
<b>22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submil copy of each)</b>			<b>23.</b> WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)	

**24. CASING AND LINER RECORD (Report all strings set in well)**

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
21	20" J-55	133.0	0	110		Redim		0	
17.5	13 3/8 J-55	54.5	27	1,078		Class	270	27	
12 1/4	9 5/8 P110	47	26	4,309		Class	422	28	
8 1/2	7 P110	32	32	11,393		Class	565		

**25. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	7,750	6,741						

**26. PRODUCING INTERVALS**

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) CANE CREEK	7,750	11,310	7,398	7,835	7,750 11,310	.35	16,900	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

**27. PERFORATION RECORD**

**28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.**

WAS WELL HYDRAULICALLY FRACTURED? YES ☐ NO ☒ IF YES -- DATE FRACTURED: \_\_\_\_\_

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

**29. ENCLOSED ATTACHMENTS:**

☐ ELECTRICAL/MECHANICAL LOGS      ☐ GEOLOGIC REPORT      ☐ DST REPORT      ☒ DIRECTIONAL SURVEY  
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION      ☐ CORE ANALYSIS      ☐ OTHER: \_\_\_\_\_

**30. WELL STATUS:**

Testing



## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE: 8/21/2014		HOURS TESTED: 656		TEST PRODUCTION RATES: →	OIL – BBL: 120	GAS – MCF: 1	WATER – BBL: 45	PROD. METHOD: flowing
CHOKE SIZE: 2"	TBG. PRESS. 20	CSG. PRESS. 750	API GRAVITY	BTU – GAS	GAS/OIL RATIO 0	24 HR PRODUCTION RATES: →	OIL – BBL: 20	GAS – MCF: 1	WATER – BBL: 45	INTERVAL STATUS: flowing

## INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

flare

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
Clastic 12	5,962	5,995	SH/ANHY/DOL/SILT	Moenkopi	0
Clastic 18	6,865	6,880	SH/ANHY/DOL/SILT	Cutler	398
Clastic 19	6,888	6,910	SH/ANHY/DOL/SILT	Honaker Trail	2,113
Cane Creek	7,670			Paradox	3,756

## 35. ADDITIONAL REMARKS (Include plugging procedure)

## 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Renee Kendrick TITLE Environmental Project Specialist  
 SIGNATURE *Renee Kendrick* DATE 12/10/2014

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
 1594 West North Temple, Suite 1210  
 Box 145801  
 Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

## CC 32-1-25-20H As-Built Cane Creek Completion Wellbore Diagram - 08/20/14



WELL NAME: CC 32-1-25-20 H SECTION, TOWNSHIP, RANGE: SWSE Sec 32 25S 20E  
 FIELD: Cane Creek SHL: 451' FSL 2297' FEL  
 LOCATION: Grand County, UT SURFACE LAT: 38.590578 NAD 1983  
 API#: 43-019-50049 SURFACE LONG: 109.735419 NAD 1983  
 AFE NUMBER: 130050 KB: 5251  
 SPUD DATE: 06/28/2014 GL: 5228  
 REVISION DATE: 08/20/2014 UPDATED BY: RAB

PIPE	Size	Grade	Weight	CONN	OD (")	ID (")	Drift Dia (")	Burst	Collapse	TOC (')	TOP (')	BTM (')
Conductor	20	PL 5L	133.0			18.730					cellar	110
Surf Csg	13 3/8"	J-55	54.5	BTC	13.375	12.615	12.459	2,730	1,130	Surface	wellhead	1,079
Inter Csg	9 5/8"	P 110	47.0	BTC	9.825	8.681	8.525	9,440	5,310	Surface	wellhead	4,309
Prod Csg	7"	HCP 110	29.0	BTC	7.000	6.184	6.059	12,220	8,530	4,560	wellhead	4,112
Prod Csg	7"	HCP 110	29.0	BTC	7.000	6.094	5.989	12,460	10,760		4112	10,074
Prod Csg	7"	HCP 110	29.0	BTC	7.000	6.184	6.059	12,220	8,530		10,074	11,393

Current Status: M40 Spud 06/28/14. M40 did the following completion work: 7" bit & scraper to 11,345' and rev circ 3X btm up clean; 08/03/14 Weatherford CBL f/ 7510'; ran 7" bit & scraper and hung on Baker packer at 45' KB. Rig release 08/04/14. Completion RU 08/13/14; Fired guns 08/20/14; Turn well over to production *xxxxxx*

## Production Equipment

Production Tubing:  
 2 7/8" 6.5 ppg L-N-80 EUE BRD tubing (w/ space out pups 1 jnt below tbg hanger) from surface  
 2 7/8" side pocket mandrel w/ dummy valve at ~ 5000'  
 2 7/8" 6.5 ppg L-N-80 EUE BRD tubing  
 X profile 2.313" seal bore at ~ 6058'  
 1 joint 2 7/8" 6.5 ppg L-N-80 EUE BRD  
 4" x 2 7/8" ported chemical injection sub w/ 3/8" capillary tubing to surface  
 6" x 2 7/8", 6.5 ppg Pup  
 L-10 on-off connector skirt

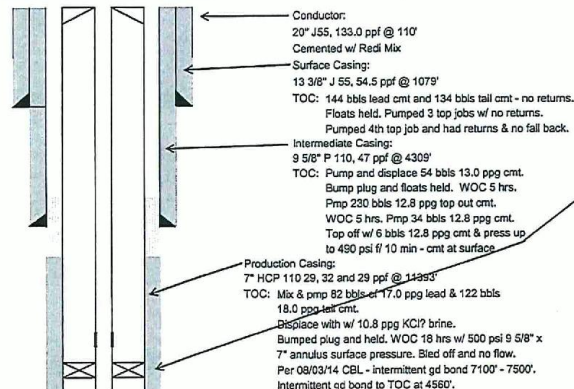
## Production Packer:

2 7/8" x 7" retrievable production packer at 6741'

Note: L-10 on-off connector seal nipple on top of packer has an internal X profile (2.313" seal bore)

## Packer Tail Assembly:

8" x 2 7/8", 6.5 ppg Pup  
 XN profile 2.313" seal bore & 2.205" NO-GO  
 6" x 2 7/8", 6.5 ppg Pup  
 2 7/8" box x pin tubing swivel  
 2 7/8" 6.5 ppg L-N-80 EUE BRD to ported flow subs and 4.625" Halliburton TCP gun system at 7750' top shot  
 (three 2 7/8" ported flow subs immediately above or 1 joint above gun assembly)



## \*\*TCP Completion

## Perforations (underbalanced TCP perforations completion)

Top (MD)	Blm (MD)	Top (TVD)	Blm (TVD)	Net Int (MD)	Size inch	SPF #	Phase deg	Holes #	Status	Blank (MD)
feet	feet	feet	feet	feet						feet
a 7,750	8,770	-7358		1020	0.35	5	60	5100	proposed	
b 8,860	9,310			430	0.35	5	60	2150	*	110
c 9,380	11,310		-7835	1930	0.35	5	60	6650	*	70
d				0	0.35	5	60	0	*	
e				0	0.35	5	60	0	*	
f				0	0.35	5	60	0	*	
g				0				0		
h				0				0		
i										
j										
Gross: 3,560		3,380		16900		180				

\*\*TCP System: Halliburton 4 5/8" EHC, 5 spf, 60 deg phase, 39 gm, Millennium HMX

KOP: ~6800'

Cane Creek Top: 7665' MD; 7398' TVD, 74 deg inclination, 456' vert section

TD: 11405' MD; 7856' TVD, 78 deg incl  
 7" Shoe: 11345' MD float collar  
 11393' MD float shoe

## PathFinder – a Schlumberger company

## Survey Report

FIDELITY E & P COMPANY  
 CANE CREEK 32-1-25-20 ST2  
 GRAND COUNTY, UTAH  
 API#: 43-019-50049 Rig: NABORS M40  
 PathFinder Office Supervisor: DAN HARWELL  
 PathFinder Field Engineers: S. ROBERTSON  
 E. SMITH

Survey Horiz. Reference: WELLHEAD  
 Ref Coordinates: LAT: 38.34.50.1060 N LON: 109.44.7.5412 W  
 GRID Reference: NAD83 Utah central Lambert  
 Ref GRID Coord: X: 2144903.1410 Y: 6656706.3090  
 North Aligned To: TRUE NORTH  
 Total Magnetic Correction: 10.60° EAST TO TRUE  
 Vertical Section Plane: 16.72  
 Survey Vert. Reference: 5254.00' Rotary Table To Ground  
 Altitude: 5231.00' Ground To MSL

Survey Calculations by RX5 V6.05A using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular (ft)	Offsets (ft)	Closure Dist (ft)	Dir (deg)	DLS (dg/100ft)	TEMP (F)
ORIGIN OF WELL AT SURFACE.											
0.00	0.00	0.00	-0.01	0.00	-0.00	0.00 S	0.00 E	0.01@	136.88	0.00	0.00
THE FOLLOWING ARE GYRODATA GYRO SURVEYS.											
100.00	0.38	130.53	99.99	100.00	-0.14	0.22 S	0.26 E	0.34@	130.64	0.38	0.00
200.00	0.21	223.05	199.99	100.00	-0.43	0.57 S	0.38 E	0.69@	146.07	0.44	0.00
300.00	0.36	228.89	299.99	100.00	-0.86	0.91 S	0.02 E	0.91@	178.67	0.15	0.00
400.00	0.39	225.68	399.99	100.00	-1.43	1.35 S	0.46 W	1.43@	198.73	0.04	0.00
500.00	0.41	200.21	499.99	100.00	-2.08	1.93 S	0.83 W	2.10@	203.20	0.18	0.00
600.00	0.37	200.93	599.99	100.00	-2.76	2.56 S	1.07 W	2.78@	202.55	0.04	0.00
700.00	0.37	195.12	699.98	100.00	-3.41	3.18 S	1.26 W	3.42@	201.70	0.04	0.00
800.00	0.27	200.54	799.98	100.00	-3.97	3.71 S	1.43 W	3.98@	201.10	0.10	0.00
900.00	0.29	205.12	899.98	100.00	-4.45	4.16 S	1.62 W	4.47@	201.30	0.03	0.00
1000.00	0.23	212.80	999.98	100.00	-4.89	4.56 S	1.84 W	4.91@	201.96	0.07	0.00
1100.00	0.19	264.96	1099.98	100.00	-5.15	4.74 S	2.11 W	5.19@	204.01	0.19	0.00
1200.00	0.19	264.14	1199.98	100.00	-5.27	4.77 S	2.44 W	5.36@	207.10	0.00	0.00
1300.00	0.45	229.68	1299.98	100.00	-5.67	5.04 S	2.91 W	5.82@	209.95	0.31	0.00
1400.00	0.51	211.32	1399.97	100.00	-6.43	5.68 S	3.44 W	6.64@	211.19	0.16	0.00
1500.00	0.46	208.43	1499.97	100.00	-7.25	6.41 S	3.86 W	7.48@	211.05	0.06	0.00
1600.00	0.83	212.01	1599.96	100.00	-8.34	7.38 S	4.43 W	8.61@	211.01	0.37	0.00
1700.00	0.80	208.95	1699.95	100.00	-9.72	8.60 S	5.16 W	10.03@	210.94	0.05	0.00
1800.00	1.04	202.00	1799.94	100.00	-11.31	10.06 S	5.83 W	11.63@	210.12	0.26	0.00
1900.00	0.91	207.85	1899.93	100.00	-12.99	11.60 S	6.55 W	13.32@	209.43	0.16	0.00
2000.00	0.96	205.15	1999.91	100.00	-14.60	13.06 S	7.27 W	14.95@	209.11	0.07	0.00
2100.00	0.91	204.52	2099.90	100.00	-16.22	14.54 S	7.96 W	16.58@	208.69	0.05	0.00
2200.00	1.02	204.62	2199.88	100.00	-17.88	16.07 S	8.66 W	18.26@	208.31	0.11	0.00



# PathFinder – a Schlumberger company

## Survey Report

FIDELITY E & P COMPANY  
CANE CREEK 32-1-25-20 ST2  
GRAND COUNTY, UTAH  
API#: 43-019-50049 Rig: NABORS M40

Page 02,06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)
2300.00	0.94	204.80	2299.87	100.00	-19.58	17.63 S	9.37 W	19.96@	208.00	0.08	0.00
2400.00	0.77	212.44	2399.86	100.00	-21.04	18.94 S	10.08 W	21.45@	208.02	0.20	0.00
2500.00	0.93	203.04	2499.85	100.00	-22.49	20.25 S	10.76 W	22.93@	207.97	0.21	0.00
2600.00	1.08	204.00	2599.83	100.00	-24.23	21.86 S	11.46 W	24.68@	207.66	0.15	0.00
2700.00	0.98	207.24	2699.82	100.00	-26.01	23.48 S	12.23 W	26.48@	207.52	0.12	0.00
2800.00	0.78	211.71	2799.80	100.00	-27.50	24.82 S	12.98 W	28.01@	207.61	0.21	0.00
2900.00	1.07	201.98	2899.79	100.00	-29.09	26.26 S	13.69 W	29.62@	207.53	0.33	0.00
3000.00	1.01	205.84	2999.77	100.00	-30.89	27.92 S	14.42 W	31.43@	207.31	0.09	0.00
3100.00	1.13	205.38	3099.76	100.00	-32.74	29.61 S	15.23 W	33.29@	207.22	0.12	0.00
3200.00	1.12	209.57	3199.74	100.00	-34.66	31.35 S	16.13 W	35.26@	207.23	0.08	0.00
3300.00	0.97	203.71	3299.72	100.00	-36.46	32.97 S	16.96 W	37.08@	207.21	0.18	0.00
3400.00	0.88	209.22	3399.71	100.00	-38.05	34.42 S	17.67 W	38.69@	207.18	0.13	0.00
3500.00	0.82	214.05	3499.70	100.00	-39.48	35.68 S	18.45 W	40.17@	207.34	0.09	0.00
3600.00	0.71	214.55	3599.69	100.00	-40.75	36.79 S	19.20 W	41.49@	207.56	0.11	0.00
3700.00	0.87	214.28	3699.68	100.00	-42.07	37.92 S	19.98 W	42.86@	207.78	0.16	0.00
3800.00	0.83	212.68	3799.67	100.00	-43.49	39.16 S	20.80 W	44.34@	207.97	0.05	0.00
3900.00	0.83	215.41	3899.66	100.00	-44.87	40.36 S	21.61 W	45.78@	208.16	0.04	0.00
4000.00	1.11	216.25	3999.64	100.00	-46.47	41.73 S	22.60 W	47.46@	208.44	0.28	0.00
4100.00	2.40	243.90	4099.60	100.00	-48.80	43.43 S	25.05 W	50.14@	209.98	1.51	0.00
4200.00	3.92	240.95	4199.44	100.00	-52.68	46.01 S	29.92 W	54.89@	213.03	1.53	0.00
** TIE INTO GYRODATA GYRO SURVEYS AT 4225' MD.											
4225.00	4.10	239.74	4224.38	25.00	-53.94	46.88 S	31.44 W	56.45@	213.85	0.80	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.											
4347.00	3.87	255.14	4346.09	122.00	-59.29	50.13 S	39.19 W	63.63@	218.01	0.89	104.64
4443.00	3.69	262.68	4441.88	96.00	-62.24	51.36 S	45.38 W	68.54@	221.47	0.55	115.48
4538.00	2.37	258.47	4536.74	95.00	-64.42	52.14 S	50.34 W	72.47@	223.99	1.41	129.94
4634.00	0.26	244.02	4632.71	96.00	-65.51	52.63 S	52.48 W	74.33@	224.92	2.21	137.17
4730.00	0.18	133.04	4728.71	96.00	-65.72	52.83 S	52.57 W	74.53@	224.86	0.38	129.94
4826.00	0.18	141.33	4824.71	96.00	-65.87	53.05 S	52.36 W	74.54@	224.62	0.03	140.78
4922.00	0.26	86.33	4920.71	96.00	-65.88	53.16 S	52.05 W	74.40@	224.40	0.22	144.39



# PathFinder – a Schlumberger company

## Survey Report

FIDELITY E & P COMPANY  
CANE CREEK 32-1-25-20 ST2  
GRAND COUNTY, UTAH  
API#: 43-019-50049 Rig: NABORS M40

Page 03,06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)
5017.00	0.44	96.26	5015.71	95.00	-65.74	53.18 S	51.47 W	74.01@	224.06	0.20	144.39
5113.00	0.53	96.78	5111.71	96.00	-65.60	53.27 S	50.66 W	73.52@	223.56	0.09	148.01
5209.00	0.62	70.29	5207.70	96.00	-65.21	53.15 S	49.73 W	72.79@	223.10	0.29	144.39
5305.00	0.53	72.81	5303.70	96.00	-64.66	52.84 S	48.82 W	71.95@	222.73	0.10	148.01
5401.00	0.70	64.12	5399.69	96.00	-64.01	52.46 S	47.87 W	71.02@	222.38	0.20	148.01
5495.00	0.79	69.97	5493.68	94.00	-63.24	51.98 S	46.74 W	69.91@	221.96	0.13	151.62
5590.00	0.97	91.18	5588.67	95.00	-62.63	51.78 S	45.32 W	68.81@	221.20	0.39	151.62
5687.00	1.06	95.43	5685.66	97.00	-62.23	51.88 S	43.61 W	67.77@	220.05	0.12	151.62
5783.00	1.32	103.12	5781.64	96.00	-61.99	52.21 S	41.65 W	66.79@	218.58	0.32	151.62
5878.00	1.23	114.16	5876.61	95.00	-62.05	52.88 S	39.65 W	66.10@	216.87	0.27	151.62
5974.00	0.09	254.25	5972.61	96.00	-62.23	53.32 S	38.79 W	65.94@	216.03	1.36	144.39
6070.00	0.26	347.51	6068.61	96.00	-62.08	53.13 S	38.91 W	65.85@	216.21	0.29	137.17
6166.00	0.09	99.45	6164.61	96.00	-61.88	52.93 S	38.88 W	65.67@	216.30	0.32	148.01
6260.00	0.35	99.90	6258.61	94.00	-61.83	52.99 S	38.52 W	65.51@	216.02	0.28	148.01
6356.00	0.62	134.48	6354.60	96.00	-62.04	53.41 S	37.86 W	65.47@	215.34	0.40	148.01
6449.00	0.79	135.78	6447.60	93.00	-62.59	54.22 S	37.06 W	65.67@	214.35	0.18	151.62
6545.00	0.79	157.75	6543.59	96.00	-63.42	55.30 S	36.35 W	66.18@	213.31	0.31	151.62
6641.00	1.06	165.95	6639.57	96.00	-64.70	56.78 S	35.88 W	67.16@	212.29	0.31	151.62
6735.00	1.58	171.62	6733.55	94.00	-66.62	58.90 S	35.48 W	68.76@	211.06	0.57	151.62
6799.00	0.62	161.79	6797.54	64.00	-67.70	60.11 S	35.24 W	69.68@	210.38	1.52	151.62
6831.00	3.08	16.55	6829.52	32.00	-66.99	59.45 S	34.94 W	68.96@	210.45	11.27	155.24
6863.00	6.86	13.36	6861.40	32.00	-64.22	56.76 S	34.26 W	66.30@	211.11	11.84	155.24
6895.00	9.94	13.14	6893.05	32.00	-59.55	52.21 S	33.19 W	61.87@	212.44	9.63	144.39
6927.00	12.66	14.49	6924.43	32.00	-53.29	46.13 S	31.68 W	55.96@	214.48	8.54	151.62
6959.00	15.92	15.68	6955.43	32.00	-45.40	38.50 S	29.62 W	48.58@	217.57	10.23	151.62
6991.00	19.26	16.98	6985.93	32.00	-35.73	29.23 S	26.89 W	39.71@	222.61	10.51	151.62
7023.00	21.98	17.67	7015.88	32.00	-24.46	18.47 S	23.53 W	29.91@	231.87	8.53	151.62
7055.00	25.32	17.38	7045.19	32.00	-11.63	6.23 S	19.67 W	20.63@	252.42	10.44	155.24
7087.00	28.05	16.52	7073.78	32.00	2.74	7.51 N	15.48 W	17.21@	295.89	8.62	155.24
7119.00	30.51	16.16	7101.69	32.00	18.39	22.53 N	11.08 W	25.11@	333.81	7.71	155.24

## PathFinder – a Schlumberger company

### Survey Report

FIDELITY E & P COMPANY  
CANE CREEK 32-1-25-20 ST2  
GRAND COUNTY, UTAH  
API#: 43-019-50049 Rig: NABORS M40

Page 04,06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)
7151.00	33.85	16.55	7128.77	32.00	35.43	38.88 N	6.28 W	39.39@	350.82	10.46	155.24
7183.00	36.93	18.06	7154.85	32.00	53.96	56.57 N	0.76 W	56.57@	359.23	10.00	155.24
7215.00	39.31	17.75	7180.02	32.00	73.71	75.37 N	5.31 E	75.55@	4.03	7.46	155.24
7247.00	42.38	17.20	7204.23	32.00	94.63	95.33 N	11.59 E	96.03@	6.93	9.66	155.24
7279.00	45.99	16.82	7227.17	32.00	116.93	116.65 N	18.11 E	118.05@	8.83	11.31	155.24
7311.00	49.33	15.97	7248.72	32.00	140.58	139.34 N	24.78 E	141.53@	10.09	10.62	155.24
7343.00	52.76	15.31	7268.84	32.00	165.46	163.30 N	31.49 E	166.31@	10.91	10.84	155.24
7375.00	55.66	14.63	7287.55	32.00	191.40	188.37 N	38.19 E	192.21@	11.46	9.22	155.24
7407.00	58.65	14.25	7304.90	32.00	218.26	214.41 N	44.89 E	219.06@	11.83	9.40	158.85
7439.00	62.61	15.20	7320.60	32.00	246.12	241.37 N	51.98 E	246.91@	12.15	12.64	158.85
7503.00	68.85	15.75	7346.89	64.00	304.42	297.57 N	67.55 E	305.14@	12.79	9.78	158.85
7599.00	71.75	15.54	7379.25	96.00	394.78	384.59 N	91.92 E	395.43@	13.44	3.03	158.85
7631.00	72.46	16.35	7389.08	32.00	425.23	413.87 N	100.28 E	425.85@	13.62	3.27	158.85
7663.00	73.95	16.37	7398.33	32.00	455.86	443.27 N	108.91 E	456.45@	13.80	4.66	158.85
7695.00	76.77	16.54	7406.41	32.00	486.82	472.96 N	117.68 E	487.38@	13.97	8.83	162.46
7709.00	77.65	16.10	7409.51	14.00	500.47	486.06 N	121.52 E	501.02@	14.04	6.99	140.78
7805.00	78.96	15.97	7428.97	96.00	594.47	576.41 N	147.48 E	594.98@	14.35	1.37	151.62
7901.00	78.35	15.96	7447.86	96.00	688.58	666.90 N	173.37 E	689.07@	14.57	0.64	151.62
7995.00	80.28	15.21	7465.28	94.00	780.93	755.87 N	198.19 E	781.42@	14.69	2.20	155.24
8091.00	85.21	16.24	7477.40	96.00	876.12	847.51 N	223.99 E	876.61@	14.80	5.24	155.24
8187.00	84.86	14.78	7485.71	96.00	971.73	939.66 N	249.57 E	972.24@	14.87	1.56	158.85
8283.00	87.93	14.53	7491.75	96.00	1067.47	1032.34 N	273.80 E	1068.04@	14.85	3.21	158.85
8379.00	91.19	15.62	7492.49	96.00	1163.41	1125.02 N	298.77 E	1164.02@	14.87	3.58	158.85
8475.00	90.48	15.36	7491.09	96.00	1259.38	1217.52 N	324.40 E	1260.00@	14.92	0.79	158.85
8571.00	89.25	14.16	7491.31	96.00	1355.32	1310.35 N	348.86 E	1356.00@	14.91	1.79	158.85
SIDETRACK 2 DEPARTS ORIGINAL WELLBORE AT 8580' MD.											
8603.00	86.97	16.25	7492.37	32.00	1387.29	1341.21 N	357.25 E	1387.98@	14.92	9.66	158.85
8635.00	86.53	18.12	7494.18	32.00	1419.23	1371.73 N	366.69 E	1419.90@	14.97	5.99	162.46
8667.00	87.76	20.22	7495.78	32.00	1451.16	1401.92 N	377.18 E	1451.77@	15.06	7.60	162.46
8762.00	87.49	22.08	7499.71	95.00	1545.79	1490.44 N	411.43 E	1546.18@	15.43	1.98	162.46

# PathFinder – a Schlumberger company

## Survey Report

FIDELITY E & P COMPANY  
CANE CREEK 32-1-25-20 ST2  
GRAND COUNTY, UTAH  
API#: 43-019-50049 Rig: NABORS M40

Page 05,06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)
8858.00	88.20	22.70	7503.32	96.00	1641.25	1579.14 N	447.97 E	1641.45@	15.84	0.98	158.85
8954.00	88.90	25.58	7505.75	96.00	1736.41	1666.71 N	487.21 E	1736.46@	16.29	3.09	162.46
9050.00	86.70	24.86	7509.44	96.00	1831.28	1753.48 N	528.08 E	1831.28@	16.76	2.41	162.46
9145.00	84.06	20.89	7517.09	95.00	1925.40	1840.70 N	564.89 E	1925.43@	17.06	5.01	148.01
9239.00	84.42	22.38	7526.53	94.00	2018.57	1927.63 N	599.37 E	2018.67@	17.27	1.62	151.62
9335.00	85.38	20.48	7535.06	96.00	2113.87	2016.64 N	634.30 E	2114.04@	17.46	2.21	155.24
9430.00	85.21	20.32	7542.85	95.00	2208.35	2105.38 N	667.30 E	2208.60@	17.59	0.24	158.85
9526.00	85.21	21.27	7550.87	96.00	2303.77	2194.81 N	701.27 E	2304.12@	17.72	0.99	158.85
9622.00	85.47	22.33	7558.67	96.00	2399.08	2283.65 N	736.80 E	2399.57@	17.88	1.13	158.85
9718.00	85.21	22.74	7566.47	96.00	2494.27	2372.03 N	773.47 E	2494.95@	18.06	0.50	158.85
9814.00	83.62	19.12	7575.82	96.00	2589.53	2461.25 N	807.60 E	2590.36@	18.17	4.10	158.85
9910.00	85.82	16.85	7584.65	96.00	2685.09	2552.16 N	837.11 E	2685.94@	18.16	3.28	158.85
10005.00	85.12	16.10	7592.15	95.00	2779.79	2642.97 N	863.97 E	2780.60@	18.10	1.08	158.85
10101.00	83.54	16.04	7601.64	96.00	2875.31	2734.77 N	890.41 E	2876.07@	18.03	1.65	162.46
10197.00	80.81	16.06	7614.71	96.00	2970.40	2826.16 N	916.70 E	2971.11@	17.97	2.84	158.85
10293.00	79.05	15.36	7631.49	96.00	3064.91	2917.14 N	942.29 E	3065.56@	17.90	1.97	158.85
10389.00	78.70	16.47	7650.02	96.00	3159.09	3007.73 N	968.12 E	3159.70@	17.84	1.19	158.85
10484.00	78.96	15.36	7668.42	95.00	3252.28	3097.35 N	993.68 E	3252.85@	17.79	1.18	162.46
10580.00	81.34	13.15	7684.84	96.00	3346.77	3189.02 N	1016.96 E	3347.24@	17.69	3.36	162.46
10674.00	80.46	13.21	7699.71	94.00	3439.40	3279.39 N	1038.12 E	3439.78@	17.57	0.94	162.46
10770.00	79.84	13.12	7716.13	96.00	3533.81	3371.49 N	1059.66 E	3534.09@	17.45	0.65	158.85
10866.00	76.68	13.62	7735.66	96.00	3627.63	3462.92 N	1081.39 E	3627.84@	17.34	3.33	158.85
10961.00	75.45	13.46	7758.54	95.00	3719.69	3552.56 N	1102.98 E	3719.84@	17.25	1.30	158.85
11057.00	77.12	14.73	7781.30	96.00	3812.85	3643.01 N	1125.70 E	3812.96@	17.17	2.16	162.46
11153.00	76.94	14.48	7802.85	96.00	3906.33	3733.53 N	1149.28 E	3906.42@	17.11	0.32	158.85
11248.00	77.73	14.67	7823.68	95.00	3998.96	3823.24 N	1172.61 E	3999.02@	17.05	0.85	162.46
11339.00	78.35	15.42	7842.53	91.00	4087.94	3909.21 N	1195.72 E	4087.99@	17.01	1.05	158.85
STRAIGHT-LINE PROJECTION TO BIT DEPTH AT 11405' MD.											
11405.00	78.35	15.42	7855.86	66.00	4152.56	3971.52 N	1212.91 E	4152.61@	16.98	0.00	0.00

## PathFinder – a Schlumberger company Survey Report

FIDELITY E & P COMPANY  
CANE CREEK 32-1-25-20 ST2  
GRAND COUNTY, UTAH  
API#: 43-019-50049 Rig: NABORS M40

Page 06,06

---

\*\* The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder – a Schlumberger company and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.



Effective Date:

3/1/2016

<b>FORMER OPERATOR:</b>	<b>NEW OPERATOR:</b>
Fidelity E&P Company N3155 1801 Californa Street, Suite 2500 Denver, CO 80202	Wesco Operating, Inc. N4030 PO Box 1650 Casper, WY 82602
<b>CA Number(s):</b>	<b>Unit(s):</b> Cane Creek Threemile

**WELL INFORMATION:**

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
See Attached List									

**OPERATOR CHANGES DOCUMENTATION:**

1. Sundry or legal documentation was received from the **FORMER** operator on: 4/12/2016
2. Sundry or legal documentation was received from the **NEW** operator on: 4/12/2016
3. New operator Division of Corporations Business Number: 8742016-0143

**REVIEW:**

1. Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: 4/12/2016
2. Receipt of Acceptance of Drilling Procedures for APD on: 4/12/2016
3. Reports current for Production/Disposition & Sundries: 4/19/2016
4. OPS/SI/TA well(s) reviewed for full cost bonding: 4/19/2016
5. UIC5 on all disposal/injection/storage well(s) approved on: 4/13/2016
6. Surface Facility(s) included in operator change: Blue Hills Gas Plant  
Dead House Lateral Pipeline  
Dubinky Booster Station  
Long Canyon Facility
7. Inspections of PA state/fee well sites complete on (only upon operators request): N/A

**NEW OPERATOR BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UTB0000685
2. Indian well(s) covered by Bond Number: N/A
3. State/fee well(s) covered by Bond Number(s): RLB0016443

**DATA ENTRY:**

1. Well(s) update in the **OGIS** on: 4/21/2016 ✓
2. Entity Number(s) updated in **OGIS** on: 4/21/2016
3. Unit(s) operator number update in **OGIS** on: 4/21/2016
4. Surface Facilities update in **OGIS** on: 4/21/2016
5. State/Fee well(s) attached to bond(s) in **RBDMS** on: 4/21/2016
6. Surface Facilities update in **RBDMS** on: 4/21/2016

**LEASE INTEREST OWNER NOTIFICATION:**

1. The **NEW** operator of the Fee (Mineral) wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

**COMMENTS:**

From: Fidelity Exploration Production Company N3155

To: Wesco Operating, Inc. N4030

Effective: 3/1/2016

Well Name	Section	TWN	RNG	API Numner	Entity	Mineral	Surface	Type	Status	Unit
KANE SPRINGS 16-1	16	250S	180E	4301931341	11484	State	State	WD	A	CANE CREEK
CANE CREEK UNIT 2-2-25-18	2	250S	180E	4301950044		State	State	OW	APD	CANE CREEK
Cane Creek Unit 25-1-25-19	25	250S	190E	4301950048		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 6-1-25-19	6	250S	190E	4301950052		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 29-1-25-19	29	250S	190E	4301950053		Federal	Federal	OW	APD	CANE CREEK
Cane Creek 10-1-25-19	10	250S	190E	4301950054		Federal	Federal	OW	APD	
Cane Creek Unit 30-1-25-19	30	250S	190E	4301950055		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 19-2-26-20	19	260S	200E	4301950056		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 14-1-25-19	14	250S	190E	4301950057		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 2-3-25-18	2	250S	180E	4301950058		Federal	State	OW	APD	CANE CREEK
Cane Creek Unit 16-3-25-18	16	250S	180E	4301950059		Federal	State	OW	APD	CANE CREEK
Cane Creek Unit 19-1-25-19	19	250S	190E	4301950060		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 32-2-25-19	32	250S	190E	4301950061		State	State	OW	APD	CANE CREEK
Cane Creek Unit 17-1-25-19	17	250S	190E	4301950062		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 16-4-25-18	16	250S	180E	4301950063		Federal	State	OW	APD	CANE CREEK
Cane Creek Unit 2-4-25-18	2	250S	180E	4301950064		Federal	State	OW	APD	CANE CREEK
Cane Creek Unit 5-1-25-18	5	250S	180E	4301950065		Federal	Federal	OW	APD	CANE CREEK
8-2-26-20	8	260S	200E	4301950068		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 19-3-26-20	19	260S	200E	4301950069		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 21-1-25-19	21	250S	190E	4301950070		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 12-2-26-19	12	260S	190E	4301950071		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 26-4-25-19	26	250S	190E	4301950072		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 21-1-25-18	21	250S	180E	4301950073		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 9-1-25-18	9	250S	180E	4301950074		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 7-1-25-19	7	250S	190E	4301950075		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 5-2-25-18	5	250S	180E	4301950076		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 7-1-25-18	7	250S	180E	4301950077		Federal	Federal	OW	APD	CANE CREEK
Cane Creek Unit 13-1-25-18	13	250S	180E	4301950078		Federal	Federal	OW	APD	CANE CREEK
Three Mile Unti 12-3-29-21	12	290S	210E	4303750070		Federal	Federal	OW	APD	THREEMILE
Three Mile Unit 16-2-29-22	16	290S	220E	4303750071		Federal	State	OW	APD	THREEMILE
Cane Creek Unit 7-2-26-20	7	260S	200E	4301950051	19706	Federal	Federal	OW	OPS	CANE CREEK
THREEMILE 16-17	16	290S	220E	4303750003	17984	State	State	OW	OPS	THREEMILE
Three Mile Unit 12-2-29-21	12	290S	210E	4303750069	19646	Federal	Federal	OW	OPS	THREEMILE
KANE SPRINGS FED 27-1	27	250S	190E	4301931310	14505	Federal	Federal	OW	P	CANE CREEK
KANE SPRINGS FED 19-1A	19	260S	200E	4301931324	14505	Federal	Federal	OW	P	CANE CREEK
KANE SPRINGS FED 10-1	10	250S	180E	4301931331	14509	Federal	Federal	OW	P	CANE CREEK
KANE SPRINGS FED 25-19-34-1	34	250S	190E	4301931334	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK 2-1	2	260S	190E	4301931396	14505	State	State	OW	P	CANE CREEK
CANE CREEK UNIT 12-1	12	260S	190E	4301950009	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT 7-1	7	260S	200E	4301950010	18923	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT# 26-2	26	250S	190E	4301950011	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT #18-1	18	260S	200E	4301950012	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK U #13-1	13	260S	190E	4301950014	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT 26-3	26	250S	190E	4301950019	14505	Federal	Federal	OW	P	CANE CREEK
CANE CREEK UNIT 28-2	28	250S	190E	4301950020	18681	Federal	Federal	OW	P	
Cane Creek Unit 17-1	17	260S	200E	4301950028	18980	Federal	Federal	OW	P	CANE CREEK
Cane Creek Unit 36-1	36	250S	190E	4301950030	14505	State	State	OW	P	CANE CREEK
Cane Creek Unit 36-2H	36	250S	190E	4301950033	14505	State	State	OW	P	CANE CREEK
Cane Creek Unit 24-2H	24	260S	190E	4301950034	19342	Federal	Federal	OW	P	CANE CREEK
Cane Creek Unit 36-3H	36	250S	190E	4301950035	19528	State	State	OW	P	CANE CREEK
CANE CREEK UNIT 2-1-25-18	2	250S	180E	4301950036	19343	Federal	State	OW	P	CANE CREEK
Cane Creek Unit 32-1-25-19	32	250S	190E	4301950037	19396	State	State	OW	P	
Cane Creek Unit 28-3	28	250S	190E	4301950045	19767	Federal	Federal	OW	P	CANE CREEK
Cane Creek 32-1-25-20	32	250S	200E	4301950049	19588	State	State	OW	P	
HATCH POINT 1	14	290S	210E	4303731658	11356	Federal	Federal	OW	P	
THREEMILE 43-18H	18	290S	220E	4303731857	17276	Federal	Federal	OW	P	
LONG CANYON 1	9	260S	200E	4301915925	674	Federal	Federal	OW	S	
CANE CREEK 1-1	1	260S	190E	4301931446	14505	Federal	Federal	OW	S	CANE CREEK

From: Fidelity Exploration Production Company N3155

To: Wesco Operating, Inc. N4030

Effective: 3/1/2016

CANE CREEK 24-1	24	260S	190E	4301931447	14505	Federal	Federal	OW	S	CANE CREEK
CANE CREEK 8-1	8	260S	200E	4301931449	16464	Federal	Federal	OW	S	CANE CREEK
Cane Creek Unit 18-2	18	260S	200E	4301950027	14505	Federal	Federal	OW	S	CANE CREEK
Cane Creek Unit 17-2	17	260S	200E	4301950032	14505	Federal	Federal	OW	S	CANE CREEK
Cane Creek 36-1-25-18	36	250S	180E	4301950038	19440	State	State	OW	S	
CHEVRON FED 1	24	290S	230E	4303730005	975	Federal	Federal	OW	S	
Threemile 12-7	12	290S	210E	4303750001	17837	Federal	Federal	OW	S	THREEMILE
LA SAL 29-28	29	290S	230E	4303750002	17920	Federal	Federal	OW	S	
CANE CREEK UNIT 16-2-25-18	16	250S	180E	4301950046	19512	State	State	OW	TA	CANE CREEK

# WESCO OPERATING, INC.

O I L & G A S O P E R A T I O N S

RECEIVED

APR 12 2016

DIV. OF OIL, GAS & MINING

April 8, 2016

John Rogers  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210 Box 145801  
Salt Lake City, Utah 84114

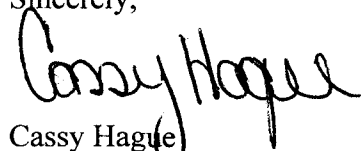
RE: Change of Operator

- A) Wells
  - B) APD'S
  - C) Dubinky Booster Station
  - D) Blue Hills Gas Plant
  - E) Dead Horse Lateral Pipeline
  - F) Authority to Inject
- Sundry Notices

Dear John Rodgers,

Please find enclosed the following documents from Fidelity Exploration & Production Company to Wesco Operating, Inc for your further handing. If you have any further questions please contact us..

Sincerely,



Cassy Hague  
307-577-5337



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: See Attached Exhibit
2. NAME OF OPERATOR: Fidelity Exploration & Production Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See Attached Exhibit
3. ADDRESS OF OPERATOR: 1801 California St., STE 250 CITY Denver STATE CO ZIP 80202		7. UNIT or CA AGREEMENT NAME: See Attached Exhibit
4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached exhibit for all wells and details COUNTY: Grand		8. WELL NAME and NUMBER: See Attached Exhibit
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: _____ STATE: UTAH		9. API NUMBER: 10. FIELD AND POOL, OR WILDCAT: See Attached Exhibit

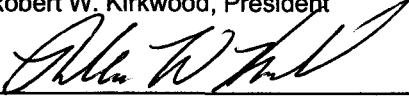
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: 3/1/2016	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

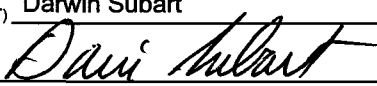
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
Effective March 1, 2016, Fidelity Exploration & Production Company (Operator Number N1355) resigns as Operator of the wells listed on the attached exhibit and Wesco Operating, Inc. has been designated as successor Operator.

Wesco Operating, Inc.  
P.O. Box 1650  
Casper, Wyoming 82602  
Phone 307-265-5178

Fidelity Exploration & Production Company  
1801 California Street, Suite 2500  
Denver, Colorado 80202  
Phone 303-893-3133

Wesco Operating, Inc.  
Robert W. Kirkwood, President

  
Signature

NAME (PLEASE PRINT) Darwin Subart	TITLE Chief Financial Officer
SIGNATURE 	DATE 4/4/2016

(This space for State use only) BLM:

APPROVED

APR 21 2016

DIV. OIL GAS & MINING  
BY: Rachel Medina

**Fidelity Exploration & Production Company Paradox Well & APD List**

<u>Entity #</u>	<u>API #</u>	<u>Permitted Well Name</u>	<u>AKA Well Name</u>	<u>Township</u>	<u>Range</u>	<u>Section(s)</u>	<u>County</u>	<u>State</u>	<u>Mineral</u>	<u>Surface</u>	<u>Well Type</u>	<u>Well Status</u>
14506	4301931310	KANE SPRINGS FED 27-1	KANE SPRINGS FED 27-1-25-19	25S	19E	27	GRAND	UT	Federal	Federal	OW	P✓
14505	4301931324	KANE SPRINGS FED 19-1A	KANE SPRINGS FED 19-1A-ST-26-20	26S	20E	19	GRAND	UT	Federal	Federal	OW	P✓
14509	4301931331	KANE SPRINGS FED 10-1	KANE SPRINGS FED 10-1-25-18	25S	18E	10	GRAND	UT	Federal	Federal	OW	P✓
14506	4301931334	KANE SPRINGS FED 25-19-34-1	KANE SPRINGS FED 25-19-34-1	25S	19E	34	GRAND	UT	Federal	Federal	OW	P✓
	4301931341	KANE SPRINGS 16-1-25-18	Disposal Well	25S	18E	16	GRAND	UT	State	State	SWD	P✓
14505	4301931396	CANE CREEK 2-1	CANE CREEK UNIT 2-1-26-19	26S	19E	2	GRAND	UT	State	State	OW	P✓
14505	4301931446	CANE CREEK 1-1	CANE CREEK UNIT 1-1-26-19	26S	19E	1	GRAND	UT	Federal	Federal	OW	P✓
14505	4301950009	CANE CREEK UNIT 12-1	CANE CREEK UNIT 12-1-26-19	26S	19E	12	GRAND	UT	Federal	Federal	OW	P✓
18923	4301950010	CANE CREEK UNIT 7-1	CANE CREEK UNIT 7-1-26-20	26S	20E	7	GRAND	UT	Federal	Federal	OW	P✓
14506	4301950011	CANE CREEK UNIT# 26-2	CANE CREEK UNIT 26-2-25-19	25S	19E	26	GRAND	UT	Federal	Federal	OW	P✓
14505	4301950012	CANE CREEK UNIT #18-1	CANE CREEK UNIT 18-1-26-20	26S	20E	18	GRAND	UT	Federal	Federal	OW	P✓
14505	4301950014	CANE CREEK U #13-1	CANE CREEK UNIT 13-1-26-19	26S	19E	13	GRAND	UT	Federal	Federal	OW	P✓
14506	4301950019	CANE CREEK UNIT 26-3	CANE CREEK UNIT 26-3-25-19	25S	19E	26	GRAND	UT	Federal	Federal	OW	P✓
18681	4301950020	CANE CREEK UNIT 28-2	CANE CREEK UNIT 28-2-25-19	25S	19E	28	GRAND	UT	Federal	Federal	OW	P✓
14505	4301950027	Cane Creek Unit 18-2	CANE CREEK UNIT 18-2-26-20	26S	20E	18	GRAND	UT	Federal	Federal	OW	P✓
18980	4301950028	Cane Creek Unit 17-1	CANE CREEK UNIT 17-1-26-20	26S	20E	17	GRAND	UT	Federal	Federal	OW	P✓
19057	4301950030	Cane Creek Unit 36-1	CANE CREEK UNIT 36-1-25-19	25S	19E	36	GRAND	UT	State	State	OW	P✓
14505	4301950032	Cane Creek Unit 17-2	CANE CREEK UNIT 17-2-26-20	26S	20E	17	GRAND	UT	Federal	Federal	OW	P✓
19527	4301950033	Cane Creek Unit 36-2H	CANE CREEK UNIT 36-2H-25-19	25S	19E	36	GRAND	UT	State	State	OW	P✓
19342	4301950034	Cane Creek Unit 24-2H	CANE CREEK UNIT 24-2-26-19	26S	19E	24	GRAND	UT	Federal	Federal	OW	P✓
19528	4301950035	Cane Creek Unit 36-3H	CANE CREEK UNIT 36-3H-25-19	25S	19E	36	GRAND	UT	State	State	OW	P✓
19396	4301950037	Cane Creek Unit 32-1-25-19	CANE CREEK UNIT 32-1-25-19	25S	19E	32	GRAND	UT	State	State	OW	P✓
19767	4301950045	Cane Creek Unit 28-3	CANE CREEK UNIT 28-3-25-19	26S	19E	28	GRAND	UT	Federal	Federal	OW	P✓
19588	4301950049	Cane Creek 32-1-25-20	CANE CREEK 32-1-25-20	25S	20E	32	GRAND	UT	State	State	OW	P✓
11356	4303731658	HATCH POINT 1	HATCH POINT FEDERAL 1	29S	21E	14	SAN JUAN	UT	Federal	Federal	OW	P✓ 26-P
17276	4303731857	THREEMILE 43-18H	THREEMILE UNIT 43-18H-29-22	29S	22E	18	SAN JUAN	UT	Federal	Federal	OW	P✓
19706	4301950051	Cane Creek Unit 7-2-26-20	CANE CREEK UNIT 7-2-26-20	26S	20E	7	GRAND	UT	Federal	Federal	OW	OPS✓
17984	4303750003	THREEMILE 16-17	THREEMILE UNIT 16-17-29-22	29S	22E	16	SAN JUAN	UT	State	State	OW	OPS✓ 3 OPS
19646	4303750069	Three Mile Unit 12-2-29-21	THREE MILE UNIT 12-2-29-21	29S	21E	12	SAN JUAN	UT	Federal	Federal	OW	OPS✓
19343	4301950036	CANE CREEK UNIT 2-1-25-18	CANE CREEK UNIT 2-1-25-18	25S	18E	2	GRAND	UT	Federal	State	OW	TA✓ 2TA
19512	4301950046	CANE CREEK UNIT 16-2-25-18	CANE CREEK UNIT 16-2-25-18	25S	18E	16	GRAND	UT	State	State	OW	TA✓
674	4301915925	LONG CANYON 1	LONG CANYON 1	26S	20E	9	GRAND	UT	Federal	Federal	OW	S✓
14505	4301931447	CANE CREEK 24-1	CANE CREEK UNIT 24-1-26-19	26S	19E	24	GRAND	UT	Federal	Federal	OW	S✓
16464	4301931449	CANE CREEK 8-1	CANE CREEK UNIT 8-1-26-20	26S	20E	8	GRAND	UT	Federal	Federal	OW	S✓
19440	4301950038	Cane Creek 36-1-25-18	CANE CREEK 36-1-25-18	25S	18E	36	GRAND	UT	State	State	OW	S✓
975	4303730005	CHEVRON FED 1	CHEVRON FEDERAL 1H	29S	23E	24	SAN JUAN	UT	Federal	Federal	OW	S✓ 7-S
17837	4303750001	Threemile 12-7	THREEMILE UNIT 12-7-29-21	29S	21E	12	SAN JUAN	UT	Federal	Federal	OW	S✓
17920	4303750002	LA SAL 29-28	LA SAL UNIT 29-28-29-23	29S	23E	29	SAN JUAN	UT	Federal	Federal	OW	S✓
	4301950044	CANE CREEK UNIT 2-2-25-18		250S	180E	2	GRAND	UT	State	State	OW	APD✓
	4301950048	Cane Creek Unit 25-1-25-19		250S	190E	25	GRAND	UT	Federal	Federal	OW	APD✓
	4301950052	Cane Creek Unit 6-1-25-19		250S	190E	6	GRAND	UT	Federal	Federal	OW	APD✓
	4301950053	Cane Creek Unit 29-1-25-19		250S	190E	29	GRAND	UT	Federal	Federal	OW	APD✓ 2APD
	4301950054	Cane Creek 10-1-25-19		250S	190E	10	GRAND	UT	Federal	Federal	OW	APD✓
	4301950055	Cane Creek Unit 30-1-25-19		250S	190E	30	GRAND	UT	Federal	Federal	OW	APD✓
	4301950056	Cane Creek Unit 19-2-26-20		260S	200E	19	GRAND	UT	Federal	Federal	OW	APD✓

<u>Entity #</u>	<u>API #</u>	<u>Permitted Well Name</u>	<u>AKA Well Name</u>	<u>Township</u>	<u>Range</u>	<u>Section(s)</u>	<u>County</u>	<u>State</u>	<u>Mineral</u>	<u>Surface</u>	<u>Well Type</u>	<u>Well Status</u>
4301950057		Cane Creek Unit 14-1-25-19		250S	190E	14	GRAND	UT	Federal	Federal	OW	APD ✓
4301950058		Cane Creek Unit 2-3-25-18		250S	180E	2	GRAND	UT	Federal	State	OW	APD ✓
4301950059		Cane Creek Unit 16-3-25-18		250S	180E	16	GRAND	UT	Federal	State	OW	APD ✓
4301950060		Cane Creek Unit 19-1-25-19		250S	190E	19	GRAND	UT	Federal	Federal	OW	APD ✓
4301950061		Cane Creek Unit 32-2-25-19		250S	190E	32	GRAND	UT	State	State	OW	APD ✓
4301950062		Cane Creek Unit 17-1-25-19		250S	190E	17	GRAND	UT	Federal	Federal	OW	APD ✓
4301950063		Cane Creek Unit 16-4-25-18		250S	180E	16	GRAND	UT	Federal	State	OW	APD ✓
4301950064		Cane Creek Unit 2-4-25-18		250S	180E	2	GRAND	UT	Federal	State	OW	APD ✓
4301950065		Cane Creek Unit 5-1-25-18		250S	180E	5	GRAND	UT	Federal	Federal	OW	APD ✓
4301950068		8-2-26-20		260S	200E	8	GRAND	UT	Federal	Federal	OW	APD ✓
4301950069		Cane Creek Unit 19-3-26-20		260S	200E	19	GRAND	UT	Federal	Federal	OW	APD ✓
4301950070		Cane Creek Unit 21-1-25-19		250S	190E	21	GRAND	UT	Federal	Federal	OW	APD ✓
4301950071		Cane Creek Unit 12-2-26-19		260S	190E	12	GRAND	UT	Federal	Federal	OW	APD ✓
4301950072		Cane Creek Unit 26-4-25-19		250S	190E	26	GRAND	UT	Federal	Federal	OW	APD ✓
4301950073		Cane Creek Unit 21-1-25-18		250S	180E	21	GRAND	UT	Federal	Federal	OW	APD ✓
4301950074		Cane Creek Unit 9-1-25-18		250S	180E	9	GRAND	UT	Federal	Federal	OW	APD ✓
4301950075		Cane Creek Unit 7-1-25-19		250S	190E	7	GRAND	UT	Federal	Federal	OW	APD ✓
4301950076		Cane Creek Unit 5-2-25-18		250S	180E	5	GRAND	UT	Federal	Federal	OW	APD ✓
4301950077		Cane Creek Unit 7-1-25-18		250S	180E	7	GRAND	UT	Federal	Federal	OW	APD ✓
4301950078		Cane Creek Unit 13-1-25-18		250S	180E	13	GRAND	UT	Federal	Federal	OW	APD ✓
4303750070		Three Mile Unti 12-3-29-21		290S	210E	12	SAN JUAN	UT	Federal	Federal	OW	APD ✓
4303750071		Three Mile Unit 16-2-29-22		290S	220E	16	SAN JUAN	UT	Federal	State	OW	APD ✓
4301950036		CANE CREEK UNIT 2-1-25-18H2		25S	18E	2	GRAND	UT	Federal	State	OW	APD ✓

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**Request to Transfer Application or Permit to Drill**

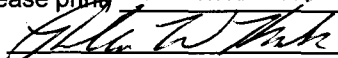
(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

<b>Well name:</b>	See attached well list
<b>API number:</b>	
<b>Location:</b>	Qtr-Qtr:                      Section:                      Township:                      Range:
<b>Company that filed original application:</b>	Fidelity Exploration & Production Company
<b>Date original permit was issued:</b>	
<b>Company that permit was issued to:</b>	Fidelity Exploration & Production Company

Check one	Desired Action:
	<b>Transfer pending (unapproved) Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
<input checked="" type="checkbox"/>	<b>Transfer approved Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	Yes	No
If located on private land, has the ownership changed?		<input checked="" type="checkbox"/>
<input type="checkbox"/> If so, has the surface agreement been updated?		
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?		<input checked="" type="checkbox"/>
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?		<input checked="" type="checkbox"/>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?		<input checked="" type="checkbox"/>
Has the approved source of water for drilling changed?		<input checked="" type="checkbox"/>
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?		<input checked="" type="checkbox"/>
Is bonding still in place, which covers this proposed well? Bond No. _____		

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Robert W. Kirkwood Title President  
Signature  Date 4/4/10  
Representing (company name) Wesco Operating, Inc.

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

**Fidelity Exploration & Production Company Paradox APD List**

<u>Date Issued</u>	<u>API #</u>	<u>Permitted Well Name</u>	<u>Township</u>	<u>Range</u>	<u>Section(s)</u>	<u>County</u>	<u>State</u>	<u>Mineral</u>	<u>Surface</u>	<u>Well Type</u>	<u>Well Status</u>
3/4/2014	4301950044	CANE CREEK UNIT 2-2-25-18	250S	180E	2	GRAND	UT	State	State	OW	APD
2/19/2015	4301950048	Cane Creek Unit 25-1-25-19	250S	190E	25	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950052	Cane Creek Unit 6-1-25-19	250S	190E	6	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950053	Cane Creek Unit 29-1-25-19	250S	190E	29	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950054	Cane Creek 10-1-25-19	250S	190E	10	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950055	Cane Creek Unit 30-1-25-19	250S	190E	30	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950056	Cane Creek Unit 19-2-26-20	260S	200E	19	GRAND	UT	Federal	Federal	OW	APD
6/26/2014	4301950057	Cane Creek Unit 14-1-25-19	250S	190E	14	GRAND	UT	Federal	Federal	OW	APD
7/21/2014	4301950058	Cane Creek Unit 2-3-25-18	250S	180E	2	GRAND	UT	Federal	State	OW	APD
8/6/2014	4301950059	Cane Creek Unit 16-3-25-18	250S	180E	16	GRAND	UT	Federal	State	OW	APD
8/6/2014	4301950060	Cane Creek Unit 19-1-25-19	250S	190E	19	GRAND	UT	Federal	Federal	OW	APD
9/22/2014	4301950061	Cane Creek Unit 32-2-25-19	250S	190E	32	GRAND	UT	State	State	OW	APD
7/30/2014	4301950062	Cane Creek Unit 17-1-25-19	250S	190E	17	GRAND	UT	Federal	Federal	OW	APD
8/12/2014	4301950063	Cane Creek Unit 16-4-25-18	250S	180E	16	GRAND	UT	Federal	State	OW	APD
9/24/2014	4301950064	Cane Creek Unit 2-4-25-18	250S	180E	2	GRAND	UT	Federal	State	OW	APD
9/2/2014	4301950065	Cane Creek Unit 5-1-25-18	250S	180E	5	GRAND	UT	Federal	Federal	OW	APD
11/25/2014	4301950068	8-2-26-20	260S	200E	8	GRAND	UT	Federal	Federal	OW	APD
12/19/2014	4301950069	Cane Creek Unit 19-3-26-20	260S	200E	19	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950070	Cane Creek Unit 21-1-25-19	250S	190E	21	GRAND	UT	Federal	Federal	OW	APD
1/13/2015	4301950071	Cane Creek Unit 12-2-26-19	260S	190E	12	GRAND	UT	Federal	Federal	OW	APD
1/13/2015	4301950072	Cane Creek Unit 26-4-25-19	250S	190E	26	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950073	Cane Creek Unit 21-1-25-18	250S	180E	21	GRAND	UT	Federal	Federal	OW	APD
1/20/2015	4301950074	Cane Creek Unit 9-1-25-18	250S	180E	9	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950075	Cane Creek Unit 7-1-25-19	250S	190E	7	GRAND	UT	Federal	Federal	OW	APD
1/20/2015	4301950076	Cane Creek Unit 5-2-25-18	250S	180E	5	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950077	Cane Creek Unit 7-1-25-18	250S	180E	7	GRAND	UT	Federal	Federal	OW	APD
1/14/2015	4301950078	Cane Creek Unit 13-1-25-18	250S	180E	13	GRAND	UT	Federal	Federal	OW	APD
7/8/2014	4303750070	Three Mile Unti 12-3-29-21	290S	210E	12	SAN JUAN	UT	Federal	Federal	OW	APD
10/2/2014	4303750071	Three Mile Unit 16-2-29-22	290S	220E	16	SAN JUAN	UT	Federal	State	OW	APD
12/16/2014	4301950036	Cane Creek Unit 2-1-25-18 H2	25S	18E	2	GRAND	UT	Federal	State	OW	APD



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Blue Hills Gas Plant</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>UTU-90108</b>
2. NAME OF OPERATOR: <b>Fidelity Exploration &amp; Production Company</b>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 1801 California St., STE 250 CITY <u>Denver</u> STATE <u>CO</u> ZIP <u>80202</u>		7. UNIT or CA AGREEMENT NAME:
PHONE NUMBER: <b>(303) 893-3133</b>		8. WELL NAME and NUMBER: <b>Blue Hills Gas Plant</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE:		9. API NUMBER:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
COUNTY: <u>Grand</u>		STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>3/1/2016</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective March 1, 2016, Fidelity Exploration & Production Company (Operator Number N1355) resigns as Operator of the Blue Hills Gas Plant located in T23S-R19E, Sections 20, 29. Wesco Operating, Inc. has been named as successor Operator.

Wesco Operating, Inc.  
P.O Box 1650  
Casper, Wyoming 82602  
Phone 307-265-5178

Fidelity Exploration & Production Company  
1801 California Street, Suite 2500  
Denver, Colorado 80202  
Phone 303-893-3133

Wesco Operating, Inc.  
Robert W. Kirkwood, President

Signature Robert W. Kirkwood

NAME (PLEASE PRINT) <u>Darwin Subart</u>	TITLE <u>Chief Financial Officer</u>
SIGNATURE <u>Darwin Subart</u>	DATE <u>4/4/2016</u>

(This space for State use only)

APPROVED

APR 21 2016

DIV. OIL GAS & MINING  
BY: Rachael Medina

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Compressor Booster Station</u>		5. LEASE DESIGNATION AND SERIAL NUMBER:
2. NAME OF OPERATOR: <b>Fidelity Exploration &amp; Production Company</b>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 1801 California St., STE 2500 CITY <u>Denver</u> STATE <u>CO</u> ZIP <u>80202</u>		7. UNIT or CA AGREEMENT NAME:
PHONE NUMBER: <u>(303) 893-3133</u>		8. WELL NAME and NUMBER: <b>Dubinky Booster Station</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE:		9. API NUMBER:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
COUNTY: <b>Grand</b>		
STATE: <b>UTAH</b>		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>3/1/2016</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	


12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

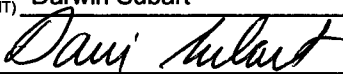
Effective March 1, 2016, Fidelity Exploration & Production Company (Operator Number N1355) resigns as Operator of the Dubinky Booster Station located along Dubinky Road, approximately 18 miles northwest of Moab, 599142 E 4280872 N UTM Zone 12, NAD83. Wesco Operating, Inc. has been named as successor Operator.

Wesco Operating, Inc.  
P.O. Box 1650  
Casper, Wyoming 82602  
Phone 307-265-5178

Fidelity Exploration & Production Company  
1801 California Street, Suite 2500  
Denver, Colorado 80202  
Phone 303-893-3133

Wesco Operating, Inc.  
Robert W. Kirkwood, President

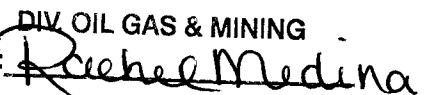
  
Signature

NAME (PLEASE PRINT) <u>Darwin Subart</u>	TITLE <u>Chief Financial Officer</u>
SIGNATURE 	DATE <u>4/4/2016</u>

(This space for State use only)

**APPROVED**

**APR 21 2016**

DIV OIL GAS & MINING  
BY: 

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

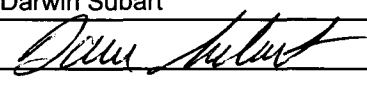
**TRANSFER OF AUTHORITY TO INJECT**

Well Name and Number <b>Kane Springs 16-1</b>	API Number <b>4301931341</b>
Location of Well  Footage : 960' FSL 1960' FWL County : Grand QQ, Section, Township, Range: <b>SESW 16 25 18</b> State : <b>UTAH</b>	Field or Unit Name <b>Cane Creek</b> Lease Designation and Number <b>ML-44333</b>

**EFFECTIVE DATE OF TRANSFER:** 3/1/2016


**CURRENT OPERATOR**

Company: Fidelity Exploration & Production Company  
Address: 1801 California Street, Suite 2500  
city Denver state CO zip 80202  
Phone: (303) 893-3133  
Comments:

Name: Darwin Subart  
Signature:   
Title: Chief Financial Officer  
Date: 4/4/2016

**NEW OPERATOR**

Company: Wesco Operating, Inc.  
Address: P.O. Box 1650  
city Casper state WY zip 82602  
Phone: (307) 265-5178  
Comments:

Name: Robert W. Kirkwood  
Signature:   
Title: President  
Date: 4/7/16

(This space for State use only)

Transfer approved by:

Title:

Comments:

Approval Date: